ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #311000, 311005, 311400, & 311410
NHIM0-0016-01(092)
NHIM0-0016-01(131)
NHIM0-0075-02(177)
NH000-0016-01(104)
Bibb County
I-16/I-75 Interchange Reconstruction

OFFICE Design Policy & Support

DATE September 28, 20100

FROM *for* Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

Attached is the approved Revised Concept Report for the above subject project.
Attachment

DISTRIBUTION:

Bobby Hilliard, State Program Delivery Engineer
Genetha Rice-Singleton, Program Control Adminstrator
Glenn Bowman, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
David Millen, District Engineer
Kerry Gore, District Utilities Engineer
Paul Liles, State Bridge Engineer
Angela Robinson, Financial Management Administrator
Angela Alexander, State Transportation Planning Administrator
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Clinton Ford, Project Manager

BOARD MEMBER - 8th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT

Project Number: NH-IM0-0016-01(092), NH-IM0-0016-01(131), NH-IM0-0075-02(177) & NH000-0016-01(104)
County: Bibb
P. I. Number: 311000-, 311005-, 311400- & 311410-
Federal Route Number: I-75, I-16, US 129, US 23, US 80, US 89, NH 24, NH 161, NH 751, NH 752, ST 24, ST 371, ST 891
State Route Number: 401, 404, 11, 22, 87

Location sketch (Page 2)
Project Description (Page 3)

Submitted for approval: *(Submit to "Concept Reports" in Outlook)*

DATE 10/7/09 — Brad Hale - Moreland Altobelli
Design Consultant Name and Firm Name (if applicable)

DATE 4/1/2010 — Russell R. McMurry
Office Head (Project Manager's Office)

DATE 2/26/10 — Nisa Ayl
Project Manager

Recommendation for approval:

DATE 4/2/10 — Glenn Bowman recommendation on file KKF
State Environmental Administrator

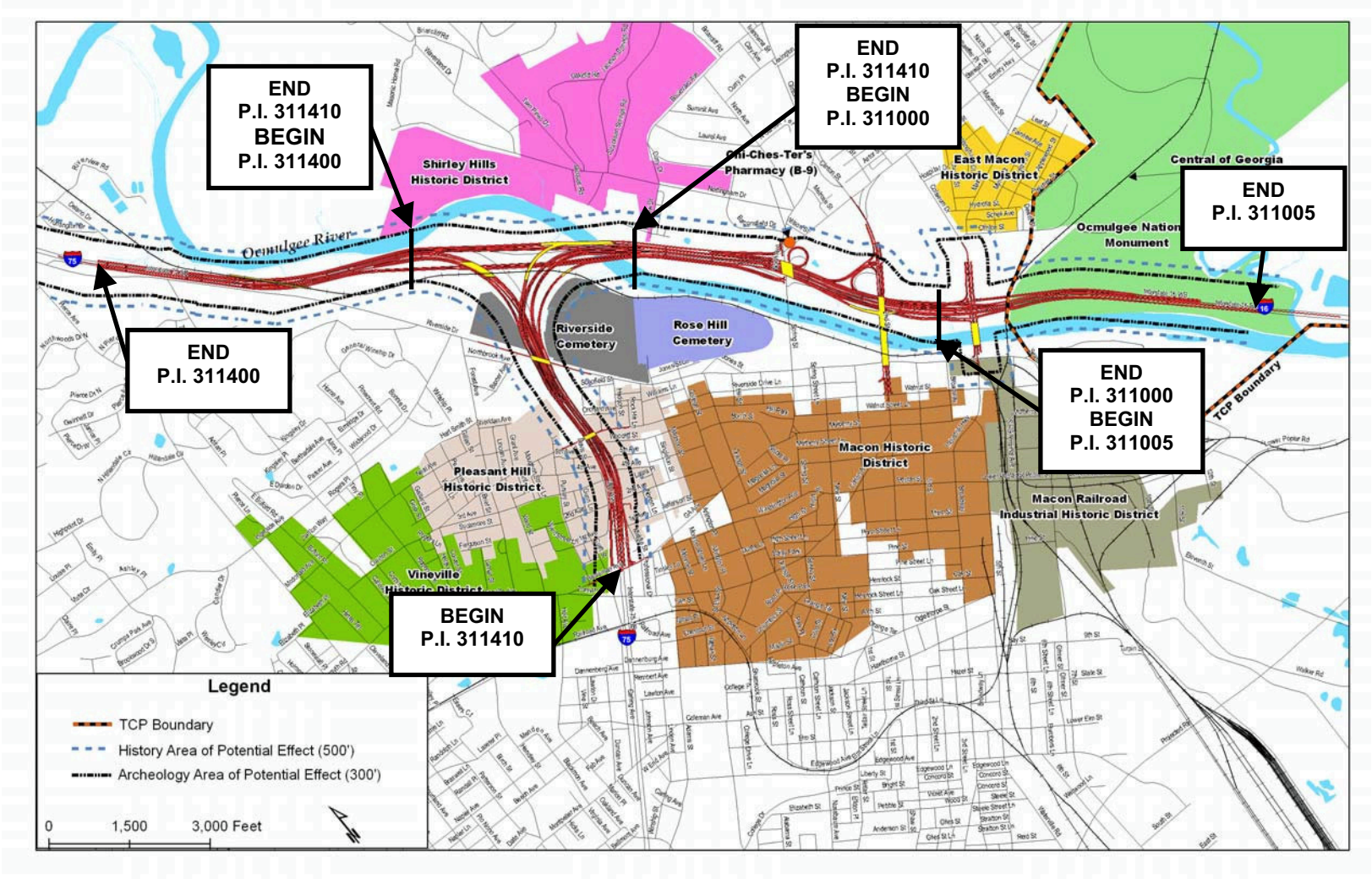
DATE 4/7/10 — Paul Liles recommendation on file KKF
State Bridge Design Engineer (if applicable)

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

* DATE 4-16-10 — Angela I. Alexander
State Transportation Planning Administrator

* The project description in the MATS' TIP as appropriate may be modified to reflect the revised concept report following consultation with the MPO.

Project Location Map



Need and Purpose: See Attachment Section 1.

Description of the Proposed Project:
The purpose of the proposed project is to improve the operational efficiency and safety of the I-16/I-75, I-16/Spring Street, I-16/Second Street, and I-16/Coliseum Drive interchanges by adding capacity to both I-75 and I-16, improving the existing interchanges (Second Street would become a full-access interchange), and by introducing a collector-distributor (CD) road system. The CD roads are to be constructed along the eastbound and westbound lanes of I-16, as well as along the northbound and southbound lanes of I-75. These CD roads would separate the local and through traffic helping to eliminate the difficult weaving maneuvers created by the close proximity of the interchanges. Due to the magnitude of the work needed to complete the reconstruction and upgrade of the aforementioned interchanges, the project has been divided into the following Georgia Department of Transportation (GDOT) projects:

NHIM0-0016-01(092), P.I. 311000 – Improvements along I-16 from I-75 to Coliseum Drive
This project includes reconstructing the I-16 interchanges with Spring Street and Second Street, improving I-16 between I-75 and Coliseum Drive, and adding eastbound and westbound collector-distributor roads.

NHIM0-0016-01(131), P.I. 311005 – I-16/Coliseum Drive Interchange Improvements
This project includes reconstructing the I-16 interchange with Coliseum Drive, improving I-16 between Second Street and Walnut Creek, and widening Coliseum Drive from Riverside Drive to the second Macon Centreplex entrance, north of I-16.

NHIM0-0075-02(177), P.I. 311400 – I-75 Improvements from Pierce Avenue to I-16
This project includes widening and improving I-75 between Pierce Avenue and the I-16/I-75 interchange.

NH000-0016-01(104), P.I. 311410 – I-16/I-75 Widening and Interchange Modification
This project consists of reconstructing the I-16/I-75 interchange and improvements to I-75 south of the interchange to the Hardeman Avenue Bridge, including the construction of collector-distributor roads along I-75.

Is the project located in a Non-attainment area? _X___ Yes _____ No.
The proposed improvements to the I-16/I-75 interchange from Pierce Avenue to the northwest, Coliseum Drive to the east, and Hardeman Avenue to the south, are included in the Macon Area Transportation Study's (MATS) Adopted Transportation Plan and the Transportation Improvement Program (TIP). Project NHIM0-0016-01(092), the widening/reconstruction of I-16 from SR 11 to SR 87, is in the TIP as MCN-10. Project NHIM0-0016-01(131), the widening of the I-16 bridge at Martin Luther King Drive, is in the TIP as MCN-66. Project NHIM0-0075-02(177), the widening/reconstruction of I-75 from County Route 478 to I-16, is in the TIP as MCN-13. Project NH000-0016-01(104), the reconstruction of the I-16/I-75 interchange, is in the TIP as MCN-9. All four projects are included in the MATS model. The conforming plan schematic for each project is found in the attachments.

PDP Classification: Major _X_ Minor __

Federal Oversight: Full Oversight (X), Exempt( ), State Funded( ), or Other ( )

Functional Classification: Interstate Highway

U. S. Route Number(s): 16, 75, 23, 80, 129 **State Route Number(s):** 401, 404, 11, 22, 87

Traffic (AADT):	Base Year: (2016)	Design Year: (2036)
I-75 Northbound	39,950	59,000
I-75 Southbound	39,950	59,000
I-75 Northbound CD	33,950	50,100
I-75 Southbound CD	22,550	30,800
I-16 Eastbound	26,750	38,450
I-16 Westbound	24,350	35,150
I-16 Eastbound CD	29,500	40,050
I-16 Westbound CD	31,950	43,350
Spring Street	53,250	72,700
Second Street	30,400	41,300
Coliseum Drive	36,800	49,900
Riverside Drive	21,400	23,650
Walnut Street	4,100	4,550

Existing design features:

Typical Sections

- I-75 – South of the interchange with I-16 - This section currently has four 12-foot lanes in each direction separated by a concrete median barrier. The inside shoulders are 8-feet wide (incl. median barrier) and the outside shoulders are 12-feet wide (10-foot paved and 2-foot grass).
- I-75 – North of the interchange with I-16 - This section is currently two 12-foot lanes separated by a 44-foot depressed median. The inside paved shoulders are 4-foot wide and the outside shoulders are 12-feet wide (10-foot paved and 2-foot grass).
- I-16 – The typical section for this interstate varies from seven 12-foot lanes (4 EB / 3 WB) between I-75 and Spring Street to six 12-foot lanes between Spring Street and Second Street to four 12-foot lanes beyond Coliseum Drive. The eastbound and westbound lanes are separated by a 44-foot depressed median. The inside paved shoulders are 4-foot wide and the outside shoulders are 10-foot wide paved and 2-foot grass.
- Spring Street – The typical section consists of two 12-foot through lanes with a variable width raised median and dedicated turn lanes.
- Second Street – The typical section consists of two 12-foot travel lanes in each direction with a 14-foot raised median and sidewalks widths varying from 4 to 10 feet.

Existing design features (cont):

- Coliseum Drive – The typical section consists of two 12-foot through lanes in each direction with a 10-foot raised median and 6-foot sidewalks.
- Riverside Drive – The typical section consists of two 12-foot lanes in each direction with a center turn-lane and rural shoulders. There is a 6-foot sidewalk on the south side of the bridge over I-75 and a 4-foot sidewalk on the north side.
- Walnut Street – The typical section consists of one 12-foot lane and a 10-foot paved area for parallel parking in each direction. There are urban shoulders with a 4-foot sidewalk.

- Posted speed:
  - I-75 55 mph
  - I-16 55 mph
  - Spring Street 35 mph
  - Second Street 35 mph south of bridge
  - Second Street 45 mph north of bridge
  - Coliseum Drive 35 mph
  - Riverside Drive 45 mph
  - Walnut Street 35 mph
- Minimum radius for curves:
  - I-75 2000’ radius
  - I-16 2900’ radius
  - Spring Street 1150’ radius
  - Second Street 2100’ radius (north of bridge)
  - Coliseum Drive 400’ radius
  - Riverside Drive 9600’ radius
  - Walnut Street 800’ radius
- Maximum super-elevation rate for curve:
  - I-75 5%
  - I-16 3.5%
  - Spring Street 4%
  - Second Street 4.5%
  - Coliseum Drive 2%
  - Riverside Drive 2%
  - Walnut Street 3.5%
- Maximum grade:
  - I-75 3.5%
  - I-16 4%
  - Spring Street 3%
  - Second Street 4.5%
  - Coliseum Drive 5%
  - Riverside Drive 5.5%
  - Walnut Street 6%

Existing design features (cont):

- Width of right of way:
  - I-75 varies 300 ft. min.
  - I-16 varies 300 ft. min.
  - Spring Street varies 100 to 150 ft.
  - Second Street varies 120 to 160 ft.
  - Coliseum Drive varies 80 to 140 ft.
  - Riverside Drive varies 85 to 200 ft.
  - Walnut Street varies 70 to 125 ft.

- Major structures:

Location of Existing Bridges	Length (in feet)	Width (in feet)	Sufficiency Rating
David Lucas pedestrian bridge over I-75	498	11	N/A
Walnut Street over I-75	239	61	93.82
Riverside Drive over I-75	392	63	63.18
I-16 westbound to I-75 southbound ramp over I-75 northbound	198	40	90.38
I-75 northbound over ramp to I-16 eastbound and Norfolk-Southern Railroad	313	34	65.88
I-75 southbound over Norfolk-Southern Railroad @ MP 164.99 (within interchange)	247	35	55.80
I-75 northbound over Norfolk-Southern Railroad @ MP 165.58	564	34.5	67.16
I-75 southbound over Norfolk-Southern Railroad @ MP 165.60	430	34.5	66.06
I-75 northbound to I-16 eastbound ramp over Norfolk-Southern Railroad	209	40	92.71
I-16 westbound to I-75 southbound ramp over ramp to I-16 eastbound and Norfolk-Southern Railroad	287	34	58.35
I-16 eastbound over Ocmulgee River	840	46	70.31
I-16 westbound over Ocmulgee River	816	50	73.31
I-16 eastbound over Spring Street	191	41	86.80
I-16 westbound over Spring Street	193	63	84.69
Second Street over I-16 and the Ocmulgee River	140	38	91.40
I-16 eastbound over Coliseum Drive	139	41	89.33
I-16 westbound over Coliseum Drive	139	41	89.33
Central of Georgia Railroad over I-16	226	N/A	N/A
Central of Georgia Railroad over I-16 westbound off-ramp to Coliseum Drive	42	N/A	N/A
Coliseum Drive over Ocmulgee River	422	77	81.20

Existing design features (cont):

- Major interchanges or intersections along the project: Interchanges include I-75 at Hardeman Avenue, I-75 at I-16, I-16 at Spring Street, I-16 at Second Street and I-16 at Coliseum Drive. Intersections include Coliseum Drive at Riverside Drive and Spring Street at Emery Hwy.
- Existing length of roadway segment
  - I-75 – 2.58 miles of existing interstate
  - I-16 - 2.92 miles of existing interstate
  - Spring Street - 0 miles of existing roadway (No reconstruction on Spring Street)
  - Second Street - 0.61 miles of existing roadway
  - Coliseum Drive – 0.35 miles of existing roadway
  - Riverside Drive - 0.30 miles of existing roadway
- Mile log for Interstate 75 from 164.12 to 166.70
- Mile log for Interstate 16 from 0.00 to 2.92
- Mile log for I-16 Interchange at Spring Street - Bibb County mile post: ≈ 1.20
- Mile log for I-16 Interchange at Second Street – Bibb County mile post: ≈ 1.56
- Mile log for I-16 Interchange at Coliseum Drive– Bibb County mile post: ≈ 1.88

Proposed Design Features:

- Typical Sections:
  - I-75 – South of the interchange with I-16, the proposed section of I-75 varies from two to three 12-foot lanes in each direction separated by a concrete median barrier. The proposed inside shoulder width varies from 6.75 to 12 feet wide and the outside shoulders are a minimum of 12 feet with 14-foot widths where required. The interstate is flanked by a two-lane southbound collector-distributor (C-D) road and a three-lane northbound C-D road. The C-D roads consist of 12-foot lanes, 8-foot inside shoulders, and 10-foot outside shoulders.
  - I-75 – North of the interchange with I-16 (at the northern project terminus), the proposed section of I-75 consists of seven 12-foot lanes (four northbound lanes and three southbound lanes) separated by a concrete median barrier. The proposed inside and outside shoulder widths are a minimum of 12 feet with 14-foot widths where required on the outside.
  - I-16 – The typical section for I-16 varies from seven 12-foot lanes (4 EB/3 WB) between I-75 and Second St. to four lanes at and beyond Coliseum Dr. The eastbound and westbound lanes are separated by a concrete median barrier and 12-foot inside shoulders. The outside shoulders are a minimum of 12 feet wide with 14-foot widths where necessary. The interstate is flanked on either side by one to three-lane C-D roads varying in width from 16 to 36 feet with 8-foot inside and 10-foot outside shoulders.
  - Spring Street – There will be no construction on Spring Street proper, except to allow for reconnection of the interstate ramps.

Proposed Design Features (cont.):

- Second Street – The typical section will be widened to a maximum of six 12-foot lanes with a variable width, raised median (9 feet to 30 feet). The number of lanes in each direction will vary from two to four to accommodate turning movements at intersections. The east side of the bridge will have a 10-foot sidewalk and the west side of the bridge will have a 6-foot sidewalk.
- Coliseum Drive – The proposed typical section consists of five 12-foot through lanes with variable with medians/turn lanes and 10-foot sidewalks.
- Riverside Drive – The typical section consists of two 12-foot lanes in each direction with variable width urban shoulders. The sidewalk width varies from 5-feet on the roadway to 6-feet on the bridge.
- Walnut Street – The proposed typical section consists of one 12-foot lane in each direction with an additional 10 feet of pavement in each direction to allow for on-street parking. The total pavement width is 44 feet and varying width urban shoulders with 5-foot sidewalks are proposed on either side.

- Proposed Design Speed
  - I-75 55 mph
  - I-16 55 mph
  - CD Roads 45 mph
  - Spring Street 35 mph
  - Second Street 35 mph south of I-16
  - Second Street 45 mph north of I-16
  - Coliseum Drive 35 mph
  - Riverside Drive 45 mph
  - Walnut Street 35 mph

- Proposed Maximum grade I-75: 4% Maximum grade allowable 4%
  Proposed Maximum grade I-16: 4% Maximum grade allowable 4%
  Proposed Maximum grade CD Roads: 4.6% Maximum grade allowable 5%
  Proposed Maximum grade Spring St: 3.2% Maximum grade allowable 9%
  Proposed Maximum grade Second St: 5.6% Maximum grade allowable 8%
  Proposed Maximum grade Coliseum Dr: 4.9% Maximum grade allowable 9%
  Proposed Maximum grade Riverside Dr: 5.4% Maximum grade allowable 6%
  Proposed Maximum grade Walnut St: 5.9% Maximum grade allowable 10%

- Proposed Maximum grade driveway 15%

- Proposed Minimum curve radius I-75: 2000' Minimum radius allowable 1060'
  Proposed Minimum curve radius I-16: 2865' Minimum radius allowable 1060'
  Proposed Minimum curve radius CD Roads: 800' Minimum radius allowable 643'
  Proposed Minimum curve radius Spring St: 1146' Minimum radius allowable 371'
  Proposed Minimum curve radius Second St: 2083' Minimum radius allowable 371'
  Proposed Minimum curve radius Coliseum Dr: 395' Minimum radius allowable 371'
  Proposed Minimum curve radius Riverside Dr: 9600' Minimum radius allowable 711'
  Proposed Minimum curve radius Walnut St: 770' Minimum radius allowable 371'

- Proposed Maximum superelevation rate for curve, I-75: 6.00%
  Proposed Maximum superelevation rate for curve, I-16: 6.00%
  Proposed Maximum superelevation rate for curve, CD Roads: 6.00%
  Proposed Maximum superelevation rate for curve, Spring St: 4.00%
  Proposed Maximum superelevation rate for curve, Second St: 4.00%
  Proposed Maximum superelevation rate for curve, Coliseum Dr: 4.00%
  Proposed Maximum superelevation rate for curve, Riverside Dr: 4.00%
  Proposed Maximum superelevation rate for curve, Walnut St: 4.00%

- Right of way – NHIM0-0016-01 (092), P.I. Number 311000
  - Width: Varies, 300' Minimum
  - Easements: Temporary (X), Permanent (X), Utility ( ), Other ( ).
  - Type of access control: Full (X), Partial ( ), By Permit ( ), Other ( ).
  - Number of parcels: 17 Number of displacements:
    - Business: 1
    - Residences: 0
    - Mobile homes: 0
    - Other: 0

- Right of way – NHIM0-0016-01 (131), P.I. Number 311005
  - Width: Varies, 300' Minimum (I-16 is located on a 300' easement through the Ocmulgee National Monument).
  - Easements: Temporary (X), Permanent (X), Utility ( ), Other ( ).
  - Type of access control: Full (X), Partial ( ), By Permit ( ), Other ( ).
  - Number of parcels: 6 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0

Proposed Design Features (cont.):

- Right of way – NHIM0-0075-02 (177), P.I. Number 311400
  - Width: Varies
  - Easements: Temporary (X), Permanent (X), Utility ( ), Other ( ).
  - Type of access control: Full (X), Partial ( ), By Permit ( ), Other ( ).
  - Number of parcels: 4 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0

- Right of way – NH000-0016-01 (104), P.I. Number 311410
  - Width: Varies
  - Easements: Temporary (X), Permanent (X), Utility ( ), Other ( ).
  - Type of access control: Full (X), Partial ( ), By Permit ( ), Other ( ).
  - Number of parcels: 125 Number of displacements:
    - Business: 0
    - Residences: 32
    - Mobile homes: 0
    - Other: 0

- Structures:
  - Bridges - Project NHIM0-0016-01(131), P.I. 311005

No.	Location	Bridge Type	No. of Spans	Bridge Length	Maximum Span	Deck Structure Width	Roadway Width	Minimum Vertical Clearance
1	CDW over Ramp D	PSC	7	665'-7"	103'-6"	37'-3"	16	16'-6"
2	I-16 & Ramp E over MLK/Coliseum	PSC	2	146'0"	73'-0"	147'-11"	60	16'-6"
3	MLK over Ocmulgee River	PSC	4	422'-2"	139'-1"	118'-4"	72	---

  - Bridges - Project NHIM0-0016-01(092), P.I. 311000

No.	Location	Bridge Type	No. of Spans	Bridge Length	Maximum Span	Deck Structure Width	Roadway Width	Minimum Vertical Clearance
4	Ramp E over Ramp C	PSC	7	789'-3"	150'-0"	Varies 29'-3" to 95'-10"	16	18'9"
5	Ramp F over Floodplain	PSC	9	737'-10"	104'-8"	Varies 45'-3" to 91'9"	54	---
6	Second St over I-16 & Ocmulgee River, RR & Riverside Dr	PSC	10	1293'-6"	154'-0"	115'-4"	72	17'0"
7	CDW over Spring St	PSC	3	234'-9"	102'-0"	57'-3"	36	19'-0"
8	I-16 E & W over Spring St.	PSC	3	224'-0"	90'-0"	141'-9"	84	17'-0"
9	Ramp F over Spring St	PSC	3	224-7"	90'-3"	45'-3"	24	17'-1"

Proposed Design Features (cont.):

- Bridges - Project NH000-0016-01(104), P.I. 311410

No.	Location	Bridge Type	No. of Spans	Bridge Length	Max. Span	Deck Structure Width	Roadway Width	Minimum Vertical Clearance
10	Detour Bridge; Ped. Bridge over River	PSC	8	966'-9'	134'-3"	42'-4"	36	---
11	Ramp CDNE, F, J, CDSE over River	PSC	33	3881'-4"	132'-10"	Varies 45'-3" to 57'-3"	36	---
12	Ramp ISE over Ocmulgee River	PSC	7	887'-5"	154'-6"	45'-3"	24	---
13	Ramp INE over ISE, CDSE, Railroad, River	PSC	8	1003'-3"	147'-0"	45'-3"	24	---
14	Ramp IWS over Ocmulgee River	PSC	8	1038'-8"	163'-0"	45'-3"	24	---
15	Ramp IWN over Ocmulgee River	PSC	7	1005'-1"	171-6"	45-3"	24	---
16	Ramp CDWS, CDWN, CDW over IWN & Ocmulgee River	PSC	12	1412'0"	165'-6"	varies 45'-3" to 57'-3"	36	17'-9"
17	Pedestrian Trail Connector East over Floodplain	Steel	6	420'-0"	72'-6"	15'-0"	10	---
18	Detour Ramp CDNE over Railroad	PSC	3	268'-0"	109'-0"	31'-3"	24	23'-0"
19	Ramp CDNE over Railroad	PSC	3	247'-0"	101'-0"	45'-3"	24	23'-0"
20	Ramp INE over RR Ramp CDSE & ISE	PSC	4	452'-0	119'-0"	45'-3"	24	18'-1"
21	Ramp IWS over RR, Ramp CDSE & ISE	PSC	4	419'-0"	115'-0"	45'-3"	24	17'-7"
22	Ramp CDWS over RR, Ramp CDSE & ISE	PSC	4	316'-3"	102'-0"	45'-3"	24	23'-0"
23	I-75 over Railroad, Ramp CDSE & ISE	PSC	5	496-6"	159'-6"	105'-9"	48	17'-4"
24	Ramp N over RR Ramp CDSE & ISE	PSC	5	579'-4"	163'-4"	31'-3"	16	17'-0"
25	Ramp IWS over I-75	PSC	2	302'-5"	181'-5"	45'-3"	24	17'-0"
26	Ramp CDWS over I-75	PSC	2	228'-10"	127'-4"	45'-3"	24	21'-5"
27	US 23/Riverside Dr over I-75	PSC	3	444'-10"	161'-4"	66'-5"	48	17'-1"
28	Walnut St over I-75	PSC	2	249'-0"	124'-6"	66'-5"	44	17'-2"
29	Ramp M over Ramp INE	PSC	6	368'-0"	64'-0"	29'-3"	16	17'-0"
30	Pedestrian Bridge over I-75	Steel	3	264'-10"	105'-0"	15'-5"	12	17'-9"

Proposed Design Features (cont.):

- Bridges - Project NHIM0-0075-02(177), P.I. 311400

No.	Location	Bridge Type	No. of Spans	Bridge Length	Maximum Span	Deck Structure Width	Roadway Width	Minimum Vertical Clearance
31	Ramp CDWN, ISE, I-75 over Railroad	PSC	Tunnel	1300'-0"	58'-0"	58'-0"	N/A	23'-0"

- Culverts
  1. Project NHIM0-0016-01 (092), P.I. 311000
     - There is an existing 7' x 7' box culvert under I-16 that will be extended.
     - There is an existing 10' x 10' box culvert under I-16 that will be extended.
     - There is an existing 54" pipe culvert under I-16 that will be extended.
  2. Project NHIM0-0075-02 (177), P.I. 311400
     - There is an existing 5' x 5' box culvert under I-75 that will be connected to a double 48" RCP that will be modified.
     - There is an existing 6' x 6' box culvert under I-75 that will be extended.
     - There is an existing 9' x 9' box culvert under I-75 that will be extended.
  3. Project NH000-0016-01 (104), P.I. 311410
     - There will be a triple 10' x 5' box culvert constructed from 1st Avenue to Walnut Street. The existing bridge culverts located on 1st Avenue and 5th Avenue will be removed. The existing box culverts on 2nd Avenue and 4th Avenue will remain.

- Major intersections and interchanges: Interchanges include I-75 at I-16, I-16 at Spring Street, I-16 at Second Street, and I-16 at Coliseum Drive. Intersections include Coliseum Drive at Riverside Drive, Second Street at Walnut Street, and Spring Street at Emery Hwy.
- Traffic control during construction: Traffic control will consist of staged construction and will allow for I-75 and I-16 to remain open during construction. Spring Street and Second Street would include closures of lanes. Detours may be required on the local street network in the Pleasant Hill subdivision area.

- Design Exceptions for controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	( )	( )	(X)
ROADWAY WIDTH:	( )	( )	(X)
SHOULDER WIDTH:	( )	(X)	( )
VERTICAL GRADES:	( )	(X)	( )
CROSS SLOPES:	( )	( )	(X)
STOPPING SIGHT DISTANCE:	(X)	( )	( )
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	(X)	( )	( )
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

Proposed Design Features (cont.):

Design Exceptions are expected at the following locations:

- **I-16 profile under the Central of Georgia Railroad**. Reconstruction of the Central of Georgia Railroad / I-16 overpass would result in impacts to the Ocmulgee National Monument, impacts to Native American Traditional Cultural Property (TCP), and impacts to the historic railroad bridge over the Ocmulgee River. In order to avoid these impacts and avoid the associated construction and mitigation costs, it may be necessary to construct this portion of the I-16 vertical alignment with a substandard k – value (sag) of 73. This would only meet 40 mph by current AASHTO standards, however, lighting will be present and this section will meet AASHTO comfort criteria for 55 mph.
- **I-16 shoulder widths under the Central of Georgia Railroad.** For the same reasons noted above, the outside shoulder width on I-16 westbound would be reduced to 4.58 feet, and the I-16 eastbound inside shoulder would be reduced to 8.35 feet for a distance of approximately 200 feet. The minimum shoulder width required by AASHTO is 10 feet.
- **Entrance ramp from Coliseum Drive to I-16 eastbound (Ramp B) shoulder widths under the Central of Georgia Railroad.** For the same reasons noted above, the outside shoulder width on Ramp B would be reduced to 1.5 feet (AASHTO min. = 8 feet) and the inside shoulder would be reduced to 0.72 feet (AASHTO min. = 2 feet) for approximately 200 feet.

- Design Variances:
  - **Proposed roadway pavement elevations with respect to the 50-year flood elevation.** To avoid the impacts and cost associated with reconstruction of the Central of Georgia Railroad overpass, segments of the following roadways will have pavement sub-grades in conflict with the 50-year flood elevation of the Ocmulgee River: I-16, Coliseum Drive, I-16 westbound exit ramp to Coliseum Drive (Ramp A), and the I-16 eastbound entrance ramp from Coliseum Drive (Ramp B).
  - **Driveway grade from Riverside Drive into the Riverside Cemetery.** To avoid impacts to gravesites within the Riverside Cemetery, the grade of this driveway will be increased to approx. 15%.

- Environmental concerns:
  - **Permits required**: Individual 404 Permit, Stream Buffer Variance, Cemetery Impact.
  - **Underground Storage Tanks (UST's)**: Twelve sites that may contain USTs were identified along the proposed project corridor. Connoco at 36 Spring Street, Amoco at 2580 Riverside Drive, Amoco 15 Spring Street, old car dealership 121 Emery Hwy, BP 1820 Hardeman Ave, 52 Market 1623 Hardeman Ave, Greyhound Bus Terminal 65 Spring, Exxon 893 Riverside, County pesticide storage yard 175 Emery Hwy, Marathon 705 Gray Highway, Sewage pump station 16/75 interchange, Sewage pump station north side of 75.

Proposed Design Features (cont.):

- **Hazardous Waste Sites**: Four sites were identified along the project corridor that may store hazardous materials. The abandoned car dealership at 121 Emery Hwy has a suspected landfill area adjacent to I-16; Bibb Mill at Coliseum Drive and I-16; pesticide storage yard at 175 Emery Hwy; and dry cleaner at 691 North Ave.
- **Historic Sites**: 13 historic resources were identified that are either listed or eligible for listing on the National Register. These historic resources are the Shirley Hills Historic District (bounded by Senate Pl., Parkview Dr., Curry Dr., Briarcliff Rd., Nottingham Dr., and the Ocmulgee River); the East Tennessee, Virginia and Georgia Railroad (follows the Ocmulgee River until it reaches Martin L. King, Jr. Blvd. and curves south); Riverside Cemetery (1301 Riverside Dr.); Rose Hill Cemetery (1071 Riverside Dr.); the East Macon Historic District (bounded by Emery Hwy, Coliseum Dr., Clinton, Fletcher, and Fairview Sts.); the Central of GA RR located along Walnut St. and the Ocmulgee River); the Ocmulgee National Monument/ Ocmulgee Old Fields Traditional Cultural Property (1207 Emery Hwy); the Macon Railroad Industrial Historic District (in the area around Broadway, 5th, 6th, and 7th Sts. and Central of GA Southern, and Seaboard RR tracks); the Macon Historic District (Walnut, Broadway, Oglethorpe, Central of GA RR, Edgewood, I-75 and Madison Ave.); the Pleasant Hill Historic District (located on the east and west sides of I-75 just south of I-16), the Vineville Historic District (along Vineville Ave., bounded within I-75, GA Academy for the Blind, Central of GA RR, Elizabeth Pl., Ingleside Ave., Douglass Ave., Ferguson St., and Ward St.); Chi-Ches-Ter's Pharmacy (656 North Ave.); and Macon-Camp Wheeler Road (Emery Hwy - between the Macon City line and the US 80/US 23 split). Adverse Effect only to the Pleasant Hill Historic District. As a result of extensive public involvement and coordination, a mitigation plan for the Pleasant Hill district has been developed that includes pavement rehabilitation on First and Second Avenues, a linear park on the east side of I-75 and a 1,700 foot culvert that will eliminate an existing open channel.
- **Parkland:** There are two public park sites (Ocmulgee National Monument and the Gateway Park) and one recreational trail (Ocmulgee Heritage Trail) identified within the project APE. Ocmulgee National Monument is located at the eastern project terminus along both sides of I-16. Gateway Park is located at the NW corner of Coliseum Drive and Riverside Drive. The Ocmulgee Heritage Trail, which currently begins at the Gateway Park, proceeds along MLK Jr. Boulevard and crosses under the Otis Redding Bridge. The trail proceeds along the banks of the Ocmulgee River under Second Street, Spring Street and the I-16/I-75 interchange up to Jackson Springs Park on Glenridge Drive (where this portion currently ends). A portion of the trail also currently extends under the Otis Redding Bridge on the south side of the river, which has recently been extended to Central City Park.
- **Archaeological Sites:** Project extends into the northwest boundary of the Ocmulgee National Monument and the Ocmulgee Old Fields/Traditional Cultural Properties (TCP); however, construction will be confined to the currently maintained road corridor, within the existing GDOT easement in this area.

Proposed Design Features (cont.):

- **Air/Noise:** The project would be consistent with the SIP for the attainment of clean air quality in Georgia and is in compliance with both state and federal air quality standards. As a result of the noise study, the following noise barriers were determined to be warranted:
    - Barrier 1 runs along the west side of I-75 between Hardeman Avenue and Walnut Street.
    - Barrier 2 runs along the east side of I-75 between Hardeman Avenue and Walnut Street.
    - Barrier 3 runs along the east side of I-75 between Walnut Street and Riverside Drive.
    - Barrier 4 runs along the west side of I-75 between Walnut Street and Riverside Drive.
    - Barrier 5 was analyzed along the west side of I-75, north of I-16, between the interstate and Riverside Drive; however, this wall did not meet the reasonable cost criteria.
    - Barrier 6 runs along the east side of I-75, south of Pierce Avenue. The GDOT project to the north of this project is also proposing to construct a noise wall along I-75 in the area of this proposed barrier; therefore, coordination between the two projects would be necessary for noise mitigation in this area.
    - Barrier 7 runs along the north side of I-16 between the Ocmulgee River and Spring Street.
- **Stream/Wetland/Mitigation/Restoration:** A total of 8.36 acres of wetlands and 1,461 linear feet of streams would be directly impacted by the construction of this project. Based on the expected stream and wetland impacts associated with the proposed project, a total of 7,277 stream mitigation credits and 51 wetland mitigation credits would be required.

- Level of environmental analysis:
    - Are Time Savings Procedures appropriate? Yes ( ) No (X)
    - Categorical exclusion ( )
    - Environmental Assessment/Finding of No Significant Impact (FONSI) (X), or
    - Environmental Impact Statement (EIS) ( ).
- Utility involvements: Possible affected utilities include telephone, cable, power, gas, ATMS and water.

Project responsibilities:

- Design: Consultant (for Georgia DOT)
- Right-of-Way Acquisition: Georgia DOT
- Relocation of Utilities: Georgia DOT
- Letting to contract: Georgia DOT
- Supervision of construction: Georgia DOT
- Providing material pits: Contractor (if required)

- Providing detours: Georgia DOT

Coordination

- Initial Concept Team Meetings: February 2003-March 2004 – 6 work sessions were held with FHWA and GDOT.
- Concept Team Meetings: January 5, 2005 – Meeting was held with GDOT and Moreland Altobelli, Inc. to discuss preferred alternative. May 20, 2005 – Meeting held with FHWA and GDOT. Alternate 9 was adopted as the new "Preferred Concept Alternative". See attached minutes of the meetings (attachment section #6).
- P. A. R.: A Practical Alternatives Report (P.A.R.) was prepared and submitted to GDOT on October 5, 2007. GDOT approved the draft P.A.R pending a P.A.R. meeting.
- FEMA, USCG, and/or TVA. - None
- Public involvement: Public outreach and coordination was accomplished through multiple open-house public information meetings, neighborhood group meetings, and a Citizen's Advisory Committee which met with the project team six times (see below). An outline of the public meetings is provided below:

  <u>Public Information / Public Hearing Open House meetings (PIOH / PHOH)</u>
  - November 16, 1999 PIOH #1 (*No concept shown – only blank aerial. Received comments regarding issues the public wanted to see resolved within the proposed corridor.*)
  - October 24, 2000 PIOH #2 (*ALT 7 shown as 'preferred concept alternative'. 97 people attended; 102 comments received: 83% in support, 4% conditional support, 6% opposed, 7% uncommitted.*)
  - November 2, 2006 PIOH #3 (*ALT 9 shown as new 'preferred alternative'. 129 people attended; 67 comments received: 36% in support, 14% conditional support, 34% opposed, 16% uncommitted.*)
  - December 11, 2007 PHOH (*ALT 9 shown including Pleasant Hill mitigation and 3-D renderings. 222 people attended; 57 comments received: 39% in support, 26% conditional support, 28% opposed, 7% uncommitted.*)

  <u>Advisory Committee Meetings (ACM – see attachment section #7 for minutes)</u>
  - March 2, 2000 ACM #1 (*Project goals set; ALT's 1 – 6 discussed; RR relocation discussed*)
  - April 27, 2000 ACM #2 (*ALT's 4 – 6 eliminated; More study requested*)
  - August 8, 2000 ACM #3 (*ALT 7 introduced and accepted as 'preferred alt'*)
  - Sept. 28, 2000 ACM #4 (*Graphics provided for ALT 7*)
  - Nov. 17, 2004 ACM #5 (*ALT 9 introduced; Many still concerned about scale)*
  - June 14, 2005 ACM #6 (*ALT 10 introduced and rejected; ALT 9 adopted as the new preferred concept alternative. Feedback from committee was mixed.*)

  <u>Neighborhood Group Meetings (see attachment section #8 for minutes)</u>
  - June 26, 2000 Pleasant Hill Neighborhood Meeting
  - Jan. 23, 2001 Shirley Hills Neighborhood Meeting
  - Jan. 29, 2001 Pleasant Hill Neighborhood Meeting
  - Feb. 7, 2002 Shirley Hills Neighborhood Meeting
  - Feb. 27, 2002 Winship Hills Neighborhood Meeting
  - Nov. 19, 2002 Shirley Hills Neighborhood Meeting
  - Nov. 21, 2005 Pleasant Hill Community Meeting
  - Jan. 25, 2006 Pleasant Hill Community Meeting

  - Aug. 16, 2006 Pleasant Hill Community Meeting
  - Aug. 31, 2006 Pleasant Hill Neighborhood Improvement Group Meeting
  - Sept. 13, 2006 Pleasant Hill Neighborhood Improvement Group Meeting
  - Aug. 16, 2007 Pleasant Hill Neighborhood Improvement Group Meeting

- Local government comments. During the concept development stage, coordination with the local government included (but was not limited to) the following meetings. Minutes for each of these meetings are attached (see attachment section #9).
  - Nov. 20, 2001 Meeting with Mayor Jack Ellis and GA General Assembly (*Local government requested that the project proceed without further analysis of railroad relocation.*)
  - Feb. 11, 2003 Macon City Council Open Meeting (*Council passed resolution requesting GDOT to consider 'other alternatives'.*)
  - July 27, 2005 Presentation to Macon City Council
  - July 27, 2005 Presentation to Bibb County Board of Commissioners
  - July 28, 2005 Presentation to Macon Chamber of Commerce

- Other projects in the area:
  - Project IMNH0-0075-01(214), P.I. No. 311560. Improvements to the I-75/Hardeman Avenue/Forsyth Street interchange.
  - Project NHIM0-0075-02(211), P.I. No. 312090 proposes to reconstruct I-75 from a four-lane road to a six-lane road from Pierce Avenue to Arkwright Road.
  - Project CSTEE-0008-00(072), P.I. No. 0008072 proposes to construct the Ocmulgee Heritage Greenway multi-use path along the Central of Georgia Railroad on the southwest side of the Ocmulgee River.
  - Projects BRMLB-3223-00(006)/P.I. No. 351095, STP00-3223-00(004)/P.I. No. 351090, STP00-0000-00(835)/P.I. No. 0000835, and STP00-3223-00(005)/P.I. No. 351080 would widen Jeffersonville Road from a two-lane rural section to a five-lane urban section from Emery Highway (US 23, US Alt 129, SR 19, SR 87) to Emery Road (US 80, SR 57), and would widen Millerfield Road from a two-lane rural section to a five-lane urban section from Jeffersonville Road to New Clinton Road.
  - Project FLF00-0540-00(017), P.I. No. 363630 proposes to extend Eisenhower Parkway from its existing terminus at Lower Boundary Street in East Macon over to Emery Highway on the north side of I-16.

- Other Coordination Meetings (see attachment section #10 for minutes):
  - June 22, 2000 Meeting with Macon Exchange Club
  - Sept. 14, 2000 Meeting with Commission on Macon-Atlanta Rail (COMAR)
  - Jan. 4, 2001 GA Rail Passenger Authority (GRPA) Meeting
  - Feb. 6, 2001 Meeting with Bibb County Parks and Recreation
  - Jan. 14, 2002 Ocmulgee Heritage Trail Coordination Meeting
  - Jan. 10, 2003 Ocmulgee Heritage Trail Coordination Meeting

- Railroads: Norfolk Southern has existing facilities within the project corridor. Coordination is on-going. The current design provides for expansion of the existing

single track line to double-track in the future (as requested by Norfolk Southern.

- A VE Study was conducted in March and April of 2002 by Ventry & Associates. Responses were made and final VE recommendations were submitted to FHWA in November 2002. The following is a summary of the VE recommendations and the final approved action for each:
  1) Split Diamond interchange between Second Street and Coliseum Drive. REJECTED.
  2) Reduce lanes on Coliseum Drive. COMPROMISE ALT ACCEPTED.
  3) Save existing I-75 mainline bridges within I-16 interchange. REJECTED.
  4) Remove Spring Street loop ramp to I-16 WB. REJECTED.
  5) Reduce lanes on system-level ramps. REJECTED.
  6) Reduce lanes on I-75 and I-16 mainline. REJECTED.

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 6 months.
- Time to complete preliminary construction plans: 3 months.
- Time to complete right-of-way plans: 6 months.
- Time to complete final construction plans: 2 years.
- Time to complete to purchase right-of-way: 2 years.

Other alternates considered:
Ten alternatives, excluding the "No-Build" alternative and the Georgia Department of Transportation (GDOT) approved concept, were developed and evaluated to varying degrees to meet the goals of the project. Each of the concept alternatives was presented to a local Advisory Committee for review and comment. Input from the Advisory Committee, as well as work sessions with the Federal Highway Administration (FHWA), were beneficial to the project team's development of Alternative 9, which was ultimately selected as the Preferred Alternative. A full description of each of the alternatives is provided below with a discussion of the advantages and disadvantages of each. The first seven alternatives all propose to widen I-75 and I-16 as described in the approved concept; however, the design of the interchange ramps and CD road system along I-16 varies from concept to concept. These variations in the design of the CD roads and local access ramps will be detailed in the discussion of the first seven alternatives to the approved concept.

Approved Concept
The approved concept proposes to widen I-75 between Pierce Avenue and I-16 from four lanes to eight lanes. The additional two lanes in each direction would be added by widening one lane on the outside of the existing travel way and one lane in the grassed median, creating a barrier-separated interstate section. North of the I-16/I-75 interchange, the two I-75 Bridges over the Norfolk Southern Railroad would require reconstruction. Between Hardeman Avenue and I-16, one additional outside lane is proposed in both directions along I-75 to establish a ten-lane section in place of the existing eight-lane section. The existing shoulders would be widened to meet current interstate design criteria. The interstate improvements would necessitate the reconstruction of the Walnut Street overpass, the Riverside Drive overpass, and the David Lucas pedestrian bridge in Pleasant Hill.

Along I-16, the approved concept proposes six-lanes throughout the project limits, utilizing the existing, grassed median for widening to create a barrier-separated freeway section. The existing interstate consists of four westbound and three eastbound lanes west of Spring Street and two through lanes in each direction east of Spring Street for the remaining length of the project. The reduction in mainline lanes west of Spring Street is viable because of the added capacity of the proposed collector-distributor (CD) road system along I-16, which would vary from one to four lanes depending on location. In addition, the existing shoulder widths would be widened to meet current interstate design standards.

The proposed I-16 CD road system would provide access to each of the three arterial interchanges within the downtown Macon area, which are Spring Street, Second Street, and Coliseum Drive. West of the downtown area, the CD roads would provide a connection for traffic to I-75 southbound and from I-75 northbound. East of downtown, the CD road system would extend through the Ocmulgee National Monument and would tie into I-16 prior to Walnut Creek. The proposed I-16 CD system would improve the existing operational issues within this transportation corridor primarily by separating the through traffic from the local trip traffic. As cited previously in this report, the close proximity of the four interchanges along I-16 in

Other alternates considered (cont.):

downtown Macon results in undesirable traffic congestion and weaving movements between vehicles frequently entering and exiting the interstate. By separating the local and through movements via a CD road system, the volume of interacting traffic is decreased and the undesirable weaving conditions are improved. In addition, the CD roads, where the majority of the weaving movements would occur, have a 45 mph design speed compared to the 55 mph design speed of the interstate, contributing to more efficient weaving conditions. The CD system would also prevent exiting vehicles from queuing onto the interstate mainline, creating a safety issue, such as at the existing I-16 exit to Spring Street cited in the *Interchange Modification Report, Section 1.4 – Crash History.*

The eastbound CD road would run continuously along the entire length of I-16 through downtown Macon. The eastbound CD road proper would begin just east of the Ocmulgee River at the merge of two ramps that each connects with one of the eastbound interchange ramps from I-75 to I-16. Right-hand access to and from Spring Street, Second Street, and Coliseum Drive would be provided along the proposed CD road, requiring the use of an expensive braided ramp structure between Spring Street and Second Street and between Second Street and Coliseum Drive. The proposed configuration of the eastbound CD road system would result in poor driver expectancy due to the multiple destinations signed for at a single exit point on the southbound ramp to I-16 eastbound and on the northbound ramp to I-16 eastbound; this is augmented by the fact that there is significant distance between the exit point and the destination point.

Similar to its counterpart, the westbound CD road would extend along the entire length of I-16 through downtown Macon and would provide right-hand access to each of the three arterial interchanges. The existing lack of westbound access to Spring Street would be maintained and the existing partial access at Second Street would be expanded to full access. West of Spring Street, the westbound CD road would provide a right hand exit to I-75 southbound that would fly back over the westbound traffic to I-75 and merge with the southbound ramp from I-16 to I-75. The flyover exit could result in reduced driver expectancy, as vehicle must exit right to go left. The westbound CD road would continue into the I-16/I-75 interchange, terminating on the northbound ramp from I-16 to I-75. The close proximity of the proposed I-16 westbound ramp and west-to-south CD ramp junctions along I-75 southbound would result in undesirable weaving conditions at this location.

Both the eastbound and westbound CD roads would bridge over Spring Street and Coliseum Drive and would pass beneath the spans of the existing Second Street Bridge. East of Coliseum Drive, the CD roads would continue into the Ocmulgee National Monument and tie into I-16 eastbound prior to Walnut Creek. The existing railroad overpass adjacent to Coliseum Drive would require expensive modifications, such as lifting and reconstruction, to accommodate the proposed CD roads. The following modifications were proposed to the local interchanges along I-16 in order to accommodate the proposed collector-distributor road system.

- *I-16/Spring Street Interchange*

  The partial-access interchange at Second Street would be expanded to provide full

Other alternates considered (cont.):

access to the proposed CD road system, requiring the construction of two new bridges to connect the eastbound CD road to the existing Second Street bridge. The eastbound ramp to Second Street would braid with the eastbound ramp from Spring Street, while the eastbound ramp from Second Street would braid with the eastbound ramp to Coliseum Drive.

- *I-16/Second Street Interchange*

The partial-access interchange at Second Street would be expanded to provide full access to the proposed CD road system, requiring the construction of two new bridges to connect the eastbound CD road to the existing Second Street bridge. The eastbound ramp to Second Street would braid with the eastbound ramp from Spring Street, while the eastbound ramp from Second Street would braid with the eastbound ramp to Coliseum Drive.

- *I-16/Coliseum Drive Interchange*

Each of the ramps at the Coliseum Drive interchange would be reconstructed to access the proposed CD road system. The I-16 bridge over Coliseum Drive would be reconstructed and widened to six lanes. Two new bridges on the outside of I-16 would be necessary to carry the eastbound and westbound CD traffic. The east-facing ramps and CD roads would continue under the existing railroad overpass, requiring it to be reconstructed, before tying back into I-16.

Within the I-75/I-16 interchange, the following modifications would be necessary to accommodate the widening and extra capacity of the adjacent interstates in addition to the proposed collector-distributor (CD) road system. The six existing system level ramps would be reconstructed and four new ramps would be added to provide access between I-75 and the I-16 collector-distributor (CD) roads. The I-75 ramps to I-16 eastbound would both be widened to three lanes, while the other four system level ramps would consist of two lanes, as with the existing configuration. The ramps connecting with the CD system would consist of two lanes, except for the one-lane CD ramp to I-75 northbound. The seven existing bridges would be replaced with approximately ten proposed bridge structures.

This concept was eliminated primarily because of the unacceptable impacts to the Ocmulgee National Monument and the Ocmulgee Old Fields Traditional Cultural Property. The impacts to these cultural resources were due to the extension of the eastbound and westbound I-16 collector-distributor roads east of Coliseum Drive to Walnut Creek. Further drawbacks to the approved concept include expensive railroad modifications at the Central of Georgia Railroad overpass, an excessively large project footprint along I-16 with adverse impacts to the Ocmulgee River flood plain, a lack of access from the I-16 mainline to the local interchanges in downtown Macon, and undesirable weaving movements on the CD roads. Because a significant amount of traffic is diverted to the CD roads, where traffic frequently enters and exits the system in close proximity, the approved concept creates two undesirable weaving sections on the CD system. In the eastbound and westbound directions between I-75 and Spring Street, there is insufficient distance

Other alternates considered (cont.):

for the necessary weaving movements. A related operational concern is the traffic imbalance between mainline I-16 and the CD system. The primary traffic movement between I-75 and I-16 is local rather than through, which means that there would be more traffic on the CD road than on the mainline interstate.

Alternative 1

As mentioned previously, the first seven alternatives, differ from the approved concept only in the proposed configuration of the I-16 collector-distributor (CD) roads and local access ramps. Similar to the approved concept at Spring Street and Second Street, Alternative 1 proposes a right hand exits from the eastbound CD road and direct entrance ramps to I-16; this would require expensive braided ramp structures between Spring Street and Second Street and between Second Street and Coliseum Drive. The eastbound CD road would terminate at a signalized intersection with Coliseum Drive in order to avoid impacts to the Ocmulgee National Monument, identified in the approved concept. The existing ramp alignment would be utilized for the Coliseum Drive entrance to I-16 eastbound.

The westbound CD road would also be altered from the approved concept in order to avoid impacts to the Ocmulgee National Monument. Between Coliseum Drive and Spring Street, the westbound CD road would be eliminated. A westbound I-16 ramp directly to Second Street would be provided just west of the Central of Georgia Railroad overpass, utilizing existing ramp alignments to northbound and southbound Second Street. The existing ramp to northbound Second Street is currently abandoned. The westbound I-16 ramp to Coliseum Drive would maintain the existing alignment and a direct ramp from Coliseum Drive to I-16 westbound would braid with the proposed westbound ramp to Second Street. A direct ramp from Second Street to I-16 westbound would also be provided. The westbound CD road would begin just west of Spring Street at the merge of both the westbound ramps from Spring St. northbound and southbound. The westbound CD road would maintain a similar configuration to the approved concept through the I-16/I-75 Interchange with a right-hand flyover exit to I-75 southbound.

Similar to the approved concept, the Alternative 1 concept would create an undesirable signage configuration at the two exits from I-75 to the eastbound CD road and an undesirable merge movement on I-75 Southbound at the closely spaced junctions of the I-16 westbound ramp and the west-to-south CD road. These two undesirable features, along with the reduced driver expectancy due to the westbound CD right-hand flyover exit to go left to I-75 southbound, are characteristic of each of the first six alternatives. The Alternative 1 concept also maintains the undesirable weaving segment on the eastbound CD road between I-75 and Spring Street identified in the approved concept. On the westbound CD road between Spring Street and I-75, the weaving conditions identified in the approved concept are improved because more traffic is diverted to the mainline; however, the weaving section is still undesirable. The Alternative 1 concept was designed to have minimal impacts to the Central of Georgia Railroad, the Ocmulgee National Monument, and the Ocmulgee Old Fields Traditional Cultural Property; however, this concept was eliminated for the following reasons.

Other alternates considered (cont.):

- Increased construction cost due to additional braided ramp
- Poor driver expectancy due to multiple destination signage for eastbound CD at single exit point on I-75 southbound ramp to I-16 eastbound
- Undesirable weaving conditions on eastbound CD road between I-75 and Spring Street
- Undesirable weaving conditions on westbound CD road between Spring Street and I-75 (weave is improved from approved concept because there is less traffic volume on CD road)

Alternative 2

The key features of this alternative are the at-grade, signalized intersections of the eastbound CD road with Spring Street, Second Street, and Coliseum Drive and, consequently, the lack of expensive braided ramps. Like Alternative 1, the CD road would terminate at Coliseum Drive and the existing ramp alignment would be utilized for the Coliseum Drive entrance to I-16 eastbound. This configuration results in reduced construction costs, but increased difficulty in construction staging because eastbound interstate traffic cannot be efficiently diverted onto the proposed CD road. The signalized intersections would also diminish operations along the proposed CD road. To improve access to the interstate mainline, eastbound slip ramps would be provided between Spring Street and Second Street and between Second Street and Coliseum Drive to provide access to the and from the CD road. The exit slip ramp would eliminate the aforementioned poor signage to the eastbound CD destinations; however, the proximity of the slip ramp junctions on the eastbound CD to the signalized intersection with Second Street could present undesirable congestion and signage issues.

Other than the omission of the westbound ramp to northbound Second Street, the proposed configuration of the westbound CD system for Alternative 2 is exactly the same as with the approved concept and, therefore, results in the same benefits and problems. The extension of the westbound CD road east of Coliseum Drive causes undesirable impacts to the Ocmulgee National Monument and requires expensive reconstruction of the existing Central of Georgia Railroad overpass. There are undesirable weaving conditions on the westbound CD road between Spring Street and the CD exit to I-75 southbound and on I-75 southbound at the closely spaced junctions of the southbound ramp from I-16 and the west-to-south CD road. Alternative 2 was eliminated from consideration for the following reasons.

- Less efficient operations on the eastbound CD road due to the routing of CD road traffic through at-grade intersections with local streets
- Westbound CD road construction likely to require expensive modifications to the Central of Georgia Railroad
- Possible traffic queues from Second Street onto the I-16 eastbound mainline due to location of exit slip ramp
- I-16 eastbound stage construction difficult because the proposed CD road is insufficient to reroute interstate mainline traffic

Other alternates considered (cont.):

Alternative 3

Similar to Alternative 2, this alternative routes the eastbound CD road traffic through at-grade intersections with Spring Street and Second Street, but not Coliseum Drive, which has direct ramp access to and from I-16 in this concept, utilizing the existing eastbound entrance ramp alignment. The signalized intersections would reduce construction costs along the eastbound CD road; however, construction staging of the interstate traffic would be more difficult. The proposed eastbound exit ramp to Coliseum Drive would braid with the eastbound CD road, which terminates on I-16 at Coliseum Drive. A unique feature of Alternative 3 is the proposed "Texas U-turn" at Coliseum Drive, which provides eastbound access from the I-16 mainline to Second Street. No eastbound slip ramps are provided in this alternative, which inhibits access to the I-16 mainline and results in undesirable signage to multiple destinations at a single exit point along the southbound ramp from I-75 to I-16.

In the westbound direction, CD traffic would exit along with service traffic and would be routed through a signalized intersection at Coliseum Drive. This movement would utilize the existing ramp alignment, minimizing and/or avoiding impacts to the Ocmulgee National Monument and Central of Georgia Railroad overpass. Just west of the Coliseum Drive intersection, a slip ramp is proposed to provide westbound access to the I-16 mainline for traffic from Coliseum Drive. Beyond this point, the proposed westbound CD road is configured exactly the same as with Alternative 2. As such, there are undesirable weaving sections on the CD road between Spring Street and the southbound CD exit to I-75 and on I-75 Southbound at the closely spaced junctions of the southbound ramp from I-16 and the west-to-south CD road. Alternative 3 was eliminated from consideration for the following reasons.

- Slower traffic on the eastbound CD road due to routing of CD road traffic through two signalized intersections with local streets
- No direct access from the I-16 mainline to Spring Street
- No slip ramp access between I-16 eastbound and the eastbound CD road
- Stage construction on mainline I-16 difficult due to the at-grade intersections with the CD roads
- Texas U-turn concept may be confusing and would violate driver expectancy

Alternatives 1A, 2A and 3A

The original approved concept for the I-75/I-16 corridor did not include an interchange at Riverside Drive. However, the local Advisory Committee requested that a half-diamond interchange with south-facing access be evaluated at this location in order to determine if the modification would reduce the traffic volume on I-16. Three concepts -- Alternatives 1, 2, and 3 -- were studied with the addition of a half-diamond interchange at Riverside Drive.

The results of the analysis revealed two primary factors of concern when adding a half-diamond interchange at Riverside Drive. The primary concern is that it would be unsafe to allow short, local trips from Riverside Drive to enter the freeway in an interchange-to-interchange area. The

Other alternates considered (cont.):

half-diamond interchange access would create more traffic congestion and lane changing. Secondly, constructing a half-diamond interchange as opposed to a full-diamond interchange could create wrong-way entry into the interstate. For these reasons, the half-diamond interchange at Riverside Drive was eliminated from consideration.

Alternative 4

This alternative terminates the eastbound CD road at an at-grade intersection with Coliseum Drive and provides left-hand exit ramps from the eastbound CD road to Spring Street and Second Street; therefore, eliminating any eastbound braided ramps. This configuration provides direct ramp access to I-16 eastbound from Spring Street, Second Street, and Coliseum Drive, which utilize the existing I-16 eastbound entrance ramp alignment. The weave on the proposed eastbound CD road between I-75 and Spring Street that was identified in the approved concept and Alternative 1 is present in Alternative 4 also. There is not enough distance between the formation of the CD road proper and the left-hand exit to Spring Street.

In the westbound direction, the proposed CD road is eliminated between Spring Street and Second Street. Westbound traffic to Coliseum Drive and Second Street would exit together at the existing Coliseum Drive ramp from I-16. Immediately after exiting the interstate, the Coliseum Drive traffic would split to the left of the existing ramp alignment and proceed under the existing Central of Georgia Railroad overpass, necessitating expensive modifications and/or reconstruction. Second Street traffic would proceed over Coliseum Drive on structure and separate ramps would be provided to northbound and southbound Second Street. Similar to Alternative 1, the ramps would utilize existing ramp alignments, with the existing northbound ramp currently being abandoned. Separate, direct ramp access would be provided from Coliseum Drive and Second Street to I-16 westbound. Beyond Spring Street, the configuration of the proposed westbound CD road would be exactly the same as with Alternative 1. In addition to the aforementioned operational issues that are characteristic of each of the first six alternatives and the approved concept, there would be insufficient weaving distance along the proposed CD road between the Spring Street entrance and the right-hand flyover exit to I-75 southbound.

The Alternative 4 construction costs are reduced along the eastbound and westbound CD roads because of the at-grade intersections, reduced number of bridges, and lack of braided ramps. This concept provides improved traffic operations at Spring Street, Second Street, and Coliseum Drive in comparison to other alternatives, because of the grade separation at the CD road crossings. The concept did, however, have the following disadvantages and was eliminated from consideration.

- Westbound CD road likely to require expensive modifications to the Central of Georgia Railroad overpass
- No “relief valve” to get from I-16 eastbound mainline to the Macon cross streets
- Left-hand exit ramps from CD road are undesirable in relation to driver expectancy
- Successive entrance ramps to I-16 eastbound mainline could pose operational and

Other alternates considered (cont.):

weaving problems
- Difficult stage construction for I-16 eastbound mainline traffic

Alternative 5

The key feature of Alternative 5 is the conversion of Spring Street (southbound) and Second Street (northbound) into a one-way pair. This one-way pair concept utilizes an abandoned westbound ramp to Second Street northbound, while eliminating the unnecessary loop ramp at Second Street, and reconfiguring the existing loop ramp at Spring Street to accommodate traffic from the westbound CD road to southbound Spring Street. Otherwise, the configuration of the westbound CD road is the same as with Alternative 4; except that direct ramp access is provided from Coliseum Drive and Second Street to the I-16 westbound mainline.

This alternative maintains the same eastbound CD road configuration as Alternative 4. It routes the eastbound CD road through an at-grade intersection with Coliseum Drive, while providing grade-separated crossings at Spring Street and Second Street with left-hand exits from the eastbound CD. Likewise, there are no expensive braided ramps and access to I-16 eastbound from the local streets is improved, but there is an undesirable weave between I-75 and Spring Street on the eastbound CD road.

The Alternative 5 construction costs are reduced along the eastbound CD road because of the at-grade intersections, reduced number of bridges, and lack of braided ramps. This concept provides improved traffic operations at Spring Street and Second Street, in comparison to other alternatives, because the eastbound CD road is grade-separated from the cross streets and because the cross streets are now functioning as a one-way pair. The conversion of Spring Street and Second Street to a one-way pair would also allow for further improvements to the local corridor; however, this concept was eliminated from consideration for the following reasons.

- Westbound CD road likely to impact Central of Georgia Railroad east of Coliseum Drive
- No “relief valve” to get from I-16 eastbound mainline to the Macon cross streets
- Left-hand exit ramps from CD road are undesirable in relation to driver expectancy
- Successive entrance ramps to I-16 eastbound mainline could pose operational and weaving problems
- Does not utilize the existing loop ramp right-of-way at Second Street
- Possible ingress/egress issues associated with properties along one-way pairs including the Macon Centreplex

Alternative 6

The key features of Alternative 6 are the conversion of Second Street (southbound) and Coliseum Drive (northbound) into a one-way pair and the inclusion of a direct westbound CD ramp to Emery Highway. This alternative is exactly the same as Alternatives 4 and 5 in the configuration of the eastbound CD road. The modifications to the westbound CD road were

Other alternates considered (cont.):

limited to accommodating the one-way pair of Second Street and Coliseum Drive. At Coliseum Drive, the concept would be exactly the same as with Alternative 5. At Second Street, the existing loop ramp to Second Street southbound is modified to connect with the westbound CD road and a westbound ramp from Second Street would braid with the CD road and connect directly with the I-16 mainline. A direct ramp would be proposed between Spring Street and Second Street to access Emery Highway and the existing westbound access to Spring Street would remain unchanged, except that it would connect with the CD road, instead of I-16.

The Alternative 6 construction costs are reduced along the eastbound CD road because of the at-grade intersections, reduced number of bridges, and lack of braided ramps. This concept provides improved local traffic operations at Second Street and Coliseum Drive, in comparison to other alternatives, because of the one-way pair conversions of these local streets. The conversion of Second Street and Coliseum Drive to a one-way pair would also allow for further improvements to the local corridor; however, this concept was eliminated from consideration for the following reasons.

- Westbound CD road likely to require expensive modifications to the Central of Georgia Railroad east of Coliseum Drive
- No "relief valve" to get from I-16 eastbound mainline to the Macon cross streets
- Left-hand exit ramps from CD road are undesirable in relation to driver expectancy
- Successive entrance ramps to I-16 eastbound mainline could pose operational and weaving problems
- Difficult stage construction for I-16 eastbound mainline traffic
- Possible signal coordination and operational issues on Spring Street
- Possible ingress/egress issues associated with properties along the one-way pair streets, specifically, the Macon Centreplex

Alternative 7

The Alternative 7 concept was introduced as a hybrid concept created to correct deficiencies described in the approved concept and Alternative 1, while incorporating several of the positive features from Alternatives 2 and 3. While the first six alternatives focused on correcting the operational issues associated with I-16 and the proposed collector-distributor system, Alternative 7 is the first concept to address the deficiencies above and beyond those identified within the I-16 corridor. The local Advisory Committee selected Alternative 7 as the Preferred Concept Alternative in August 2000; however, after further evaluation, the concept has since been eliminated from consideration. The following is a description of the key features of the Alternative 7 concept.

This alternative proposes an eastbound collector-distributor road along I-16 that connects I-75 northbound and southbound to Spring Street and terminates at a signalized intersection there. A second leg of the eastbound CD system would take off from I-16 at Spring Street, providing undesirable, left-hand access to Second Street and terminating at a signalized intersection with

Other alternates considered (cont.):

Coliseum Drive. Direct ramp access to I-16 eastbound from all three cross streets is provided, requiring one eastbound braided ramp between Spring Street and Second Street. The proposed eastbound CD system eliminates the poor weaving conditions on I-16 eastbound between Spring Street and Coliseum Drive that would exist under the present condition. Additionally, the dedicated CD road from I-75 to Spring Street divides local traffic between the two legs of the CD system. Traffic is, therefore, more evenly balanced between the interstate and the CD system, providing more efficient operations within the transportation corridor. This imbalance in mainline and CD traffic is an operational concern that was identified in the approved concept.

The first leg of the westbound CD road originates just west of the Central of Georgia Railroad overpass, provides ingress from Coliseum Drive, egress to Second Street, and merges with the I-16 mainline at Spring Street. A direct westbound exit ramp is provided from I-16 to Coliseum Drive, utilizing the existing ramp alignment. The second leg of the westbound CD road collects traffic from Second Street and Spring Street and conveys it along I-16 to I-75 northbound and southbound via a directional split just east of the Ocmulgee River, improving the driver expectancy in comparison to the previous alternatives. The proposed westbound CD system configuration improves the local street access to I-16 westbound and eliminates the need for expensive braided ramp structures. In addition, the existing, undesirable "weaving" section on I-16 Westbound between Coliseum Drive and Second Street is eliminated and the traffic is more evenly balanced between the CD system and the interstate.

A newly developed feature of this alternative is the configuration of the west-to-south CD road merge with I-75 south of the I-16/I-75 interchange. The previous alternatives merged the west-to-south CD road on the left side of the I-16 ramp to I-75 southbound. The close proximity of the consecutive merge points between the CD road, the system level ramp, and mainline I-75 presented a problem with vehicle weaving and driver expectancy due to the left-hand ingress. In order to improve driver expectancy, the west-to-south CD road would bridge over the proposed interstate to merge on the right side of I-75 southbound. In addition, several hundred feet would be provided between the I-75 merge points of the west-to-south CD road and ramp from I-16 to improve the potential weaving conditions.

Alternative 7 has minimal impacts to the Central of Georgia Railroad, the Ocmulgee National Monument, and the Ocmulgee Old Fields Traditional Cultural Property, while improving the safety and operational efficiency of the corridor by eliminating dangerous "weaving" sections, separating the traffic movements, and enhancing the access. Although this alternative was selected as the preferred alternative and endorsed by the project's local citizen's Advisory Committee in August 2000, it has been since eliminated from consideration for the following reasons.

- *Left-hand ingress and egress on I-75 Southbound*
  Alternative 7 is configured with a fully directional three-legged "Y" type interchange similar to the configuration that currently exists. This configuration results in a left-hand exit from I-75 southbound to I-16 eastbound, and a left-hand entrance from I-16

Other alternates considered (cont.):

westbound to I-75 southbound; this is undesirable due to reduced driver expectancy and lack of continuity on the I-75 mainline through-lanes.

- *Complex weaving movements on I-75 Northbound and I-75 Southbound between Hardeman Avenue and I-16*
  The original traffic analysis (HCS and TRAF-CORSIM) resulted in an acceptable level of service for these movements based on year 2025 traffic volumes. When traffic volumes were later updated to year 2032, the weaving analysis on the section of I-75 between Hardeman Avenue and I-16 resulted in a failing level of service for both the northbound and southbound lanes. There is simply not enough distance between the existing interstate access points to adequately handle the future traffic.

Alternative 8

In an attempt to resolve the aforementioned operational issues with Alternative 7, work sessions were held with the consultants, the Federal Highway Administration (FHWA), and the Georgia Department of Transportation (GDOT). The FHWA recommended several modifications to the Alternative 7 concept that were evaluated extensively before being incorporated into Alternative 8. In addition, to the left-hand access on I-75 southbound and the complex weaving movements on I-75 south of I-16, the FHWA modifications focused on improving the undesirable weaving movements on the westbound CD road between Coliseum Drive and Second Street and on I-16 between I-75 and Spring Street. Although the Alternative 7 traffic analysis indicated acceptable levels of service, the FHWA perceived these weaving movements as inadequate. While the previous seven concepts focused primarily on alternative configurations of the I-16 CD road system and local street interchanges, Alternative 8 proposed more extensive concept improvements to I-75 north and south of the I-16/I-75 interchange, including the expansion of the CD road system. These operational and geometric improvements result in a significant increase in the project footprint along I-75 north and south of the I-16/I-75 interchange; however, along I-16, the project footprint is actually narrower.

Under the existing configuration and the configuration proposed under Alternative7, there are two left-hand access locations along I-75 southbound. North of the I-16/I-75 interchange, the ramp split to I-16 eastbound occurs on the left side of the mainline. South of the I-16/I-75 interchange, the merge from I-16 westbound occurs on the left side of the mainline. In order to improve the traffic operations at these locations, Alternative 8 relocated both left-hand ramp junctions to the right side of the interstate and shifted them further away from the existing I-16/I-75 interchange. The aforementioned split to I-16 eastbound was shifted approximately 1,700 feet north of its existing location and the merge from I-16 westbound was shifted 1,400 feet south of its existing location. Additional modifications to the previous concept would also be necessary to accommodate these improvements, including the reconfiguring of mainline ramp junctions to provide adequate distance between successive access points, thereby, reducing and/or avoiding undesirable weaving movements.

An additional CD ramp is proposed on I-75 southbound, north of the I-16/I75 interchange. The

Other alternates considered (cont.):

ramp would provide access to Hardeman Avenue via the proposed southbound CD road before merging with the northbound CD ramp from I-75 to form the eastbound CD road along I-16. This connector ramp to the southbound CD is necessary because of modifications to I-75 southbound that only allow access to Hardeman Avenue from the CD road. The ramp junction with I-75 would be located approximately 3,100 feet north of the proposed I-75 split to I-16 eastbound to provide adequate weaving distance. The widened interstate section would impact existing Riverside Drive, requiring that it be shifted almost 40 feet to the west. In terms of traffic operations, the primary drawback of this configuration is the reduced driver expectancy. There is only one exit ramp accessing four destinations, Hardeman Avenue, Spring Street, Second Street, and Coliseum Drive; this is more difficult for drivers to anticipate and requires elaborate signage. Further complicating the decision-making process is the unexpected, long distance between the exit ramp and the destination interchanges and the fact that three of the four destinations are along I-16, while the exit is located along a different interstate, I-75.

South of the I-16/I-75 interchange, bridging the west-to-south CD road and the southbound ramp from I-16 over I-75 make it desirable to realign the I-75 northbound connector ramp to follow the proposed I-75 southbound connector alignment as a barrier-separated section. The previous alternatives, like the existing configuration, proposed independent horizontal alignments for the two legs of I-75 through the I-16 interchange. The geometry changes associated with realigning the I-75 northbound connector ramp result in shifting the junction of the I-16 ramp to I-75 northbound approximately 2,000 feet to the north. In addition, the west-to-north CD road is extended to the north along I-75 to provide adequate separation from the previous interstate entrance point. The northbound CD merge with I-75 would be shifted approximately 3,600 feet north of the proposed merge point of the northbound ramp from I-16.

South of the I-16/I-75 interchange, it was necessary to extend the southbound collector-distributor (CD) along I-75 to accommodate the relocated ramp junction from I-16 westbound. The CD road would provide a right-hand exit ramp to Hardeman Avenue and would merge on the right side of I-75 between Hardeman Avenue and Forsyth Street. Extending the CD road and shifting its ramp junction with I-75 approximately 3,800 feet south of the I-16 to I-75 ramp junction improves the undesirable southbound weaving section between I-16 and Hardeman Avenue that was identified in Alternative 7; however, the TRAF-CORSIM analysis indicated a level of service “F” during the PM peak hour along this stretch due to the lack of capacity on I-75 southbound, south of the Hardeman Avenue/Forsyth Street interchange. This lack of capacity was cited in the *Executive Summary* of this report, where it was recommended that the I-75 mainline be widened from three lanes in each direction to four between Mercer University Drive and Forsyth Street, as part of the I-75/Hardeman Avenue/Forsyth Street Interchange Improvements, GDOT project NHIM0-0075-01(214). The proposed eight-lane section of the I-75 mainline was modeled as an “ultimate” condition using TRAF-CORSIM, which indicated an improvement in level of service from “F” to “D” during the PM peak hour on the section of I-75 southbound between I-16 and Hardeman Avenue. One potential drawback to this configuration is that I-16 westbound traffic must exit the interstate at Coliseum Drive and travel almost three miles along the westbound and southbound CD roads to access Hardeman Avenue, which is an

Other alternates considered (cont.):

interchange on I-75; this is contrary to driver expectancy.

Analysis of the 2032 traffic volumes for Alternative 7 also revealed an undesirable weaving section on the same stretch of freeway in the northbound direction. The TRAF-CORSIM analysis indicated a level of service of "F" for this freeway section during the AM peak hour. In order to improve the operations along this stretch of freeway, Alternative 8 proposed a two-lane northbound collector-distributor (CD) road along I-75. The proposed northbound CD road would split from I-75 at Forsyth Street, braid under the Hardeman Avenue entrance ramp, and parallel I-75, before merging with a ramp from I-75 southbound to form the eastbound CD road along I-16, which provides local access to downtown Macon. Additionally, the northbound Forsyth Street exit ramp would have to be relocated 1,400 feet south to provide the proper distance between consecutive freeway access points.

The proposed CD road effectively reduces the amount of traffic on I-75 northbound through the I-16/I-75 interchange by separating the interstate mainline through traffic from the local traffic movements. With less traffic on the mainline, the number of weaving movements is reduced and the level of service is improved on I-75 between Hardeman Avenue and the I-16 split. One drawback to locating the northbound CD ramp terminal south of Hardeman Avenue is that it eliminates interstate access from Hardeman Avenue to I-16 and, therefore, Spring Street, Second Street, and Coliseum Drive. Traffic accessing downtown Macon from Hardeman Avenue must use surface streets. The same operational problems with reduced driver expectancy and elaborate signage that occur on I-75 southbound, north of the I-16/I-75 interchange, also occur in the northbound direction at the critical decision point to I-16 eastbound or the three local interchanges. One exit ramp on I-75 accesses three destinations, Spring Street, Second Street, and Coliseum Drive, that are located along a different interstate, I-16; this requires elaborate signage. Further complicating matters is the unexpected distance that drivers must travel to reach their destination interchange after exiting the mainline. The configuration is also undesirable because the proposed CD road would convey more traffic volume than the I-75 mainline, which would mean that the CD road would experience similar operational problems as the interstate, in addition to capacity issues. More balance is needed between the mainline and the CD system traffic through this corridor.

Alternative 8 proposes a continuous eastbound CD road along I-16 that provides a right-hand exit to Spring Street, a left-hand exit to Second Street, and terminates at a signalized intersection with Coliseum Drive. The eastbound CD collects traffic from both directions of I-75 via a northbound CD road and a southbound CD connector ramp, which merge to form the eastbound CD. The eastbound CD exit at the Spring Street overpass, proposed in Alternative 7, is eliminated in order to avoid weaving problems on I-16 eastbound. Spring Street, Second Street, and Coliseum Drive each have direct ramp access to I-16 eastbound, instead of the proposed CD road, requiring that the eastbound Spring Street entrance ramp braid under the CD road.

In order to improve the existing, undesirable weaving sections, identified in Alternative 7, on I-16 between I-75 and Spring Street and on the westbound CD road between Coliseum Drive and

Other alternates considered (cont.):

Second Street, Alternative 8 proposes to configure the westbound access to the local streets along I-16. There would be a westbound ramp dedicated to Second Street that diverges from the I-16 mainline between Coliseum Drive and the Central of Georgia Railroad. The ramp would utilize the existing loop ramp alignment at Second Street. The westbound CD road traffic would be routed along the existing westbound ramp to Coliseum Drive and through a signalized intersection, before braiding under the westbound ramp to Second Street and continuing along I-16. There would be no access from the westbound CD road to the I-16 mainline. Westbound traffic from Second Street and Spring Street would be collected on the CD road and conveyed into the I-16/I-75 interchange to a directional split, which enables access to I-75 northbound or southbound. Access to I-75 southbound is via the reconfigured southbound CD road and access to I-75 northbound is via a CD connector ramp. Unlike the previous alternatives, which merged this CD connector ramp with I-75 northbound within the I-16/I-75 interchange, Alternative 8 routes the ramp parallel to I-75 and terminates it on the mainline, north of the Norfolk-Southern Railroad crossing as described previously.

A newly developed feature of Alternative 8 is the proposed reconstruction of the Second Street overpass. The previous concepts had assumed that the two proposed eastbound ramps could be tied into the existing steel bridge structure and that the CD roads could be threaded through the existing bent locations. In order to avoid impacts to the newly constructed Ocmulgee Heritage Trail, the eastbound CD roads must be constructed with little separation between mainline I-16. In addition, the preliminary vertical alignments that were generated for Alternative 7 revealed that the Second Street overpass is vertically constrained in the area of the proposed interstate due to the minimum flood elevation and maximum overpass clearance requirements. These constraints to the location and design of the CD system at Second Street make it necessary to reconstruct the existing overpass. This reconstruction would most likely have been necessary with each of the previous alternatives that proposed to thread the eastbound CD road beneath the existing bridge spans.

As mentioned previously, Alternative 8 was developed in response to cooperative work sessions in which the critical deficiencies of Alternative 7 were evaluated and addressed. These operational deficiencies include the aforementioned left-hand access on I-75 southbound and inadequate weaving movements on I-75, I-16, and the westbound CD road. However, the Alternative 8 concept creates some critical operational problems of its own and, therefore, has been eliminated from consideration for the following reasons.

- *Traffic Balance between the Mainline and the CD System*
  The northbound and eastbound CD roads access multiple destinations from one exit ramp and would actually convey more traffic than the I-75 mainline. As such, the CD system would experience critical capacity and weaving issues. Essentially, the mainline operational problems are simply shifted onto the adjacent CD roads.

- *Hardeman Avenue Access*
  There is no interstate or CD road access from Hardeman Avenue to Spring Street,

Other alternates considered (cont.):

Second Street, or Coliseum Drive. This traffic movement would have to be accomplished via surface streets and could result in negative impacts to the local traffic network.

- *Impacts to Pleasant Hill Neighborhood*
  The proposed CD roads along I-75, south of the I-16 Interchange, impact the adjacent Pleasant Hills neighborhood, which is a historic district and environmental justice community. It should be noted that the current Preferred Concept Alternative proposes similar impacts to the Pleasant Hill Neighborhood. A further evaluation concluded that these impacts were unavoidable in meeting the need and purpose of the project and mitigation is currently ongoing.

Alternative 9 (Preferred Alternative)

The Alternative 9 concept was introduced to the Advisory Committee in November 2004 as a hybrid concept intended to correct the undesirable geometric features described in Alternative 7 and integrating some of the positive features of Alternative 8. In adherence to guidelines for Federal-Aid projects with a cost in excess of 25 billion dollars, a value engineering (VE) analysis was performed on Alternative 7 in March/April 2002. The Alternative 9 concept would attempt to incorporate the results of the newly completed VE study. The flaws identified with Alternative 7 were the left-hand ingress/egress on I-75 southbound and the unacceptable weaving movements on I-75 between Hardeman Avenue and I-16. In addition, there were some undesirable weaving segments on I-16 between I-75 and Spring Street and on the westbound CD road between Coliseum Drive and Second Street.

Like Alternative 8, Alternative 9 proposes more extensive concept improvements to I-75 north and south of the I-16/I-75 interchange, primarily consisting of the expansion of the CD road system. Compared with the first six alternatives, these operational and geometric improvements result in a significant increase in the project footprint along I-75 north and south of the I-16/I-75 interchange; however, along I-16, the project footprint is actually narrower than with the first six alternatives. The I-16 mainline typical section would consist of seven lanes between I-75 and Spring Street. There would be four eastbound lanes and three westbound. Between Spring Street and Second Street, there would be six interstate lanes, and east of Second Street; there would be four lanes. North and south of the I-16/I-75 interchange, the I-75 mainline typical section would consist of three lanes in each direction. A fourth northbound auxiliary lane is proposed north of the interchange to Pierce Avenue. The existing interstate typical section consists of six lanes south of the interchange and four lanes north of the interchange. The proposed expansion of the CD road along I-75 is primarily responsible for the increase in project footprint along this corridor.

As mentioned previously, there are two left-hand access locations along mainline I-75 southbound under the existing configuration and the configuration proposed under Alternative 7. The ramp split to I-16 eastbound occurs on the left side of the mainline as does the merge from I-16 westbound. The Alternative 9 concept proposes to relocate both left-hand ramp junctions to

Other alternates considered (cont.):

the right side of the interstate and to shift them further away from the existing I-16/I-75 interchange. The aforementioned split to I-16 eastbound was shifted approximately 3,900 feet north of its existing location and the merge from I-16 westbound was shifted 1,400 feet south of its existing location. As with Alternative 8, additional modifications to the Alternative 7 concept would also be necessary to accommodate these improvements, including the reconfiguring of mainline ramp junctions to provide adequate distance between successive access points.

The relocated I-75 southbound split to I-16 eastbound would also convey the traffic to the eastbound CD road. The eastbound CD traffic would exit along with the eastbound interstate traffic and would proceed approximately 4,100 feet before exiting to the right on a CD connector ramp. This connector ramp eventually merges with a similar CD connector from the I-75 northbound ramp to I-16 to form the eastbound CD road proper just west of the Ocmulgee River. This CD road would serve Spring Street and Second Street. This configuration of the exit destinations allows for more desirable signage and driver expectancy than previous alternatives. Because of proposed modifications to I-75 southbound that allow access to Hardeman Avenue only from the southbound CD road, the Alternative 9 concept proposes an additional CD ramp connector from I-75 to the southbound CD road. The ramp would take off from the I-75 mainline north of the I-16/I-75 interchange and would terminate on the right side of the southbound CD road just north of the Riverside Drive overpass. The ramp junction with I-75 would be located approximately 2,500 feet south of the proposed southbound split to I-16 eastbound in order to provide the necessary interstate weaving distance.

South of the I-16/I-75 interchange, bridging the west-to-south CD road and the southbound ramp from I-16 over I-75 make it desirable to realign the I-75 northbound connector ramp to follow the proposed I-75 southbound connector alignment as a barrier-separated section similar to Alternative 8. Likewise, the geometry changes associated with realigning the I-75 northbound connector ramp result in shifting the junction of the I-16 ramp to I-75 northbound approximately 2,000 feet to the north; this requires that the west-to-north CD road be extended in the northbound direction to tie into I-75 at a point approximately 3,600 feet north of the merge from the I-16 westbound to northbound system level ramp.

South of the I-16/I-75 interchange, it was necessary to extend the southbound collector-distributor (CD) along I-75 to provide enough weaving distance along the interstate between the relocated ramp junction from I-16 westbound. The configuration of I-75 southbound and the adjacent CD roads and ramps is identical to what was proposed under Alternative 8. The proposed CD road would provide a right-hand exit ramp to Hardeman Avenue and would merge on the right side of I-75 between Hardeman Avenue and Forsyth Street. Approximately 3,800 feet would be provided between the successive southbound ramp junctions, which would eliminate the unacceptable weaving movements on I-75 southbound identified in Alternative 7. As mentioned previously, the freeway weaving segment analysis indicated a level of service “F” for this section of I-75 due to the lack of adequate capacity on the mainline south of Hardeman Avenue. A recommendation was made to increase the capacity of I-75 as part of the I-75/Hardeman Avenue/Forsyth Street Interchange project. One potential drawback to this

Other alternates considered (cont.):

configuration is that I-16 westbound traffic must exit the interstate at Coliseum Drive and travel almost three miles along the westbound and southbound CD roads to access the Hardeman Avenue Interchange on I-75; this is contrary to driver expectancy. The southbound CD road also causes extensive environmental impacts to the Pleasant Hill neighborhood south of the I-16/I-75 Interchange.

The section of I-75 northbound between Hardeman Avenue and the I-16 split was also identified as an unacceptable weaving segment in the analysis of the Alternative 7 concept. The distance between the existing Hardeman Avenue entrance ramp and the proposed I-16 eastbound split is not adequate for the traffic volume and speed design of the interstate in Alternative 7. The Alternative 9 concept proposes to shift the northbound split to I-16 approximately 3,900 feet to the south along I-75. The proposed ramp would take off from the I-75 mainline just north of the Hardeman Avenue overpass, braid under the reconstructed Hardeman Avenue entrance ramp before proceeding along I-75 northbound through the Pleasant Hill neighborhood and into the interchange. Northbound traffic to Spring Street would exit along with the traffic to I-16 eastbound and would continue for approximately 3,900 feet along the system level ramp before exiting to the right on a CD connector ramp. This exit would be located in the same location as the existing northbound split to I-16 eastbound. The northbound CD connector ramp would utilize the existing system level ramp alignment and would merge with a similar southbound CD connector ramp to form the eastbound CD road to Spring Street and Second Street. This configuration allows for more desirable signage and driver expectancy.

As a result of relocating the northbound split to I-16 eastbound south of the Hardeman Avenue entrance ramp, access from Hardeman Avenue to the three local I-16 interchanges is inhibited. This problem was identified with the proposed northbound CD road in Alternative 8. The Alternative 9 concept proposes a ramp that would connect from the Hardeman Avenue entrance ramp to the proposed northbound ramp to I-16 eastbound. The ramp would be located on the outside of the corridor and would cause additional environmental impacts to the adjacent Pleasant Hill neighborhood.

The Alternative 9 concept proposes a collector-distributor (CD) system along I-16 that would connect Spring Street and Second Street with I-75. Similar to the existing condition, Coliseum Drive would maintain its direct access to the I-16 mainline with modifications to the ramps. Overall, the configuration of the proposed CD configuration results in a narrower project footprint along I-16, but a wider footprint along I-75. Compared with previous alternatives, the Alternative 9 concept reduces the total number of lanes including CD roads and ramps on I-16 from fourteen to thirteen between I-75 and Spring Street, from ten to nine between Spring Street and Second Street, and from twelve to eleven between Second Street and Coliseum Drive. The I-16 mainline typical section would consist of seven lanes between I-75 and Spring Street. There would be four eastbound lanes and three westbound. Between Spring Street and Second Street, there would be six interstate lanes, and east of Second Street; there would be four lanes.

The eastbound CD road would provide access from I-75 northbound and southbound to Spring

Other alternates considered (cont.):

Street and Second Street via CD connector ramps that would merge within the I-16/I-75 interchange. The eastbound CD road would terminate just west of Spring Street, at a split right to Spring Street and left to Second Street. Direct ramp access to I-16 eastbound would be provided at Second Street, requiring one braided structure. A significant difference between the configuration proposed in previous alternatives and that of Alternative 9 is the elimination of the underutilized eastbound entrance ramp from Spring Street. Without the geometric and operational limitations imposed by the presence of this ramp, a more desirable eastbound CD road configuration is proposed in Alternative 9. The Alternative 9 eastbound CD road would eliminate the undesirable weaving movements that were identified in Alternative 7 on I-16 eastbound between I-75 and Spring Street. This weaving segment is improved because the traffic volume on the mainline interstate is reduced as the CD road serves both Spring Street and Second Street and because there is significantly more distance between the successive mainline access points on I-16.

The proposed westbound CD road takes off from the I-16 mainline between the Central of Georgia Railroad overpass and Coliseum Drive and serves both Second Street and Spring Street, eventually linking them with I-75. Right-hand access is provided at both cross streets; however, there is no proposed or existing westbound access to Spring Street. There is an existing westbound loop ramp to Second Street that would be utilized for the proposed ramp. Coliseum Drive retains its existing, direct ramp access to the I-16 mainline, requiring one braided ramp between Coliseum Drive and Second Street. This braided ramp eliminates the undesirable weaving section on the westbound CD road that was identified in Alternative 7. The Alternative 9 concept also eliminates the undesirable weaving section from Alternative 7 on I-16 westbound between Spring Street and I-75. Compared with Alternative 7, there would be less traffic on the mainline in Alternative 9 because only Coliseum Drive would have mainline access, instead of both Coliseum Drive and Second Street. In addition, there is more distance proposed between consecutive mainline access points with Alternative 9. One previously mentioned flaw with this configuration is the reduced driver expectancy for traffic on I-16 westbound, which must exit at Coliseum Drive on the westbound CD road to access Hardeman Avenue on I-75.

The Alternative 9 concept was officially announced as the Preferred Concept Alternative in June 2005 because it proposed significant improvements to the previous Preferred Concept Alternative, Alternative 7. The few drawbacks to this alternative were acceptable, when compared with the potential operational benefits. The primary flaw with Alternative 9 is the unavoidable environmental impacts to wetlands, streams, and the Pleasant Hill Historic District. As mentioned previously, the Alternative 9 concept results in a significantly larger project footprint along I-75, even though the local Advisory Committee and the Macon City Council requested that the scale of the Alternative 7 concept be reduced. The additional impacts are due to a combination of geometric modifications intended to improve the unacceptable weaving conditions within the transportation corridor. Coordination with the Pleasant Hill Historic District for the mitigation of these impacts is currently ongoing through the environmental process.

Other alternates considered (cont.):

Alternative 10

During the public involvement process, three project alternatives were submitted by local citizens. The design team evaluated and found flaws with each of the designs. Some of the key features of these three local alternatives were incorporated into a new concept, named Alternative 10. This concept combines many of the features from both Alternatives 7 and 9 and was presented to the local Advisory Committee in June 2005. There were two primary issues that the Advisory Committee requested be implemented into the Alternative 10 concept. They requested that the design team evaluate shifting some of the Spring Street traffic to Second Street and they requested that the impacts to Pleasant Hill be minimized.

In an effort to shift some of the Spring Street traffic to Second Street, the Alternative 10 concept eliminated access between Spring Street and I-75 south of the I-16/I-75 interchange. The restriction of access at Spring Street eliminates two CD ramps, most notably the westbound flyover bridge at the river, which has not been well received by the locals. Similar to Alternative 7, the Alternative 10 concept proposed an eastbound CD junction on I-16 at the Spring Street overpass. However, due to the increased traffic to Second Street, the ramp must be three lanes wide instead of two; this results in a lack of eastbound lane continuity on the I-16 mainline. The Alternative 10 concept also proposed direct ramp access to I-16 westbound at Second Street.

The rerouting of Spring Street traffic could result in additional lanes on Second Street and the reconstruction of three local intersections. The intersections of Riverside Drive, Emery Highway, and Gray Highway with Second Street would have to be reconfigured to handle the additional turning movements and increased traffic flow. Additional lanes could be necessary on Second Street; however, a capacity analysis was never performed, as flaws would emerge during the evaluation process.

Another goal with the Alternative 10 concept was to minimize the impacts to Pleasant Hill. As such, the stretch of I-75 northbound between Hardeman Avenue and the split to I-16 eastbound was configured as proposed under Alternative 7, which is almost identical to the existing condition. The elimination of any northbound ramps or CD roads along I-75 avoids significant impact to Pleasant Hill. The configuration of the southbound stretch of I-75 between I-16 and Hardeman Avenue proposed under Alternative 9 was maintained in Alternative 10. On this side of the interstate, there are minimal impacts to the residences in Pleasant Hill and there are significant operational benefits to the interstate configuration. However, this concept was eliminated from consideration because of the following operational deficiencies.

- The traffic analysis for Alternative 10 indicated unacceptable weaving conditions on I-16 westbound between Second Street and I-75. The distance between the interchanges is not adequate to handle the additional traffic rerouted from Spring Street to Second Street and onto I-16.
- Similar to Alternative 7 and the existing configuration, there is an unacceptable weaving condition on I-75 northbound between Hardeman Avenue and I-16 due to the close spacing of the entrance and exit ramps.

Other alternates considered (cont.):

- There is a lack of lane continuity on I-16 eastbound. All traffic from I-75 southbound that needs to continue onto I-16 eastbound through the city must transition at least one lane.

Comments: None.

Attachments:

1. Need and Purpose Statement
2. Cost Estimates:
    a. Construction including E&C
    b. Right-of-Way
3. Typical sections,
4. Traffic Volumes,
5. Traffic Analysis – (from Interchange Modification Report)
6. Concept Team Meeting Minutes
7. Advisory Committee Meeting Minutes
8. Neighborhood Group Meeting Minutes
9. Local Government Meeting Minutes
10. Minutes of other meetings
11. Conforming Plan Schematics
12. Concept Plan
13. QC/QA

Concur: _____
Director of Engineering

Approve: _____
for Division Administrator, FHWA

Approve: _____ Date: 9/21/2010
Chief Engineer

Attachment #1 – Need and Purpose

NEED AND PURPOSE:

A. INTRODUCTION

The proposed project consists of the reconstruction of the I-16/I-75 interchange and other I-16 interchanges within the City of Macon. The purpose of the proposed project is to improve the operational efficiency of the following interstate interchanges in Macon:

- Mainline I-16 @ Mainline I-75
- Spring Street @ I-16
- Second Street @ I-16
- Coliseum Drive @ I-16

As a result of operational improvements, the proposed project would reduce congestion, improve safety, and provide better access to and from the downtown Macon area. Improving sight distances, separating through traffic from local traffic, and improving existing interchange operations on I-16 should substantially contribute to reducing the crash rate.

The original configuration of the I-16/I-75 interchange, which was constructed in 1963, included a two-lane ramp from I-75 southbound to I-16 eastbound and provided two through lanes for traffic continuing southbound on I-75. These configurations have since been modified in order to reduce the high number of sideswipe crashes occurring at this decision point. Modifications made to improve the safety of the interchange at this point included the striping out of lanes on both the entrance to I-16 eastbound and the I-75 mainline so that only the left lane exited for I-16 and the right lane continued south on I-75. The interchange operated for many years under this condition until the 1990's when an I-75 widening project and a separate maintenance project resulted in the reclaiming of the previously striped out I-75 lane through the interchange. Both the I-75 widening project and the maintenance project were I-75 mainline capacity projects and did not address the interchange deficiencies.

Proposals to correct the deficiencies of the I-16/I-75 interchange have been studied since the early 1980's. In 1994, the Georgia Department of Transportation (GDOT) began concept development work for improving the interstate system in Macon. In 1999, the GDOT let a contract for validating the project concept, conducting the necessary environmental studies, preparing preliminary construction plans, and preparing final right-of-way plans for the I-16/I-75 interchange project.

B. EXISTING CONDITIONS

The section of I-75 to be reconstructed currently has two lanes in each direction north of I-16, and three lanes in each direction south of the I-16 interchange. The section of I-16 to be improved currently has two lanes in each direction throughout the project limits except for the section between I-75 and Spring St., which has four eastbound and three westbound lanes. The proposed project also includes four major interchanges on I-16 and I-75. The interchange of Coliseum Drive and I-16 is one of only two fully developed interchanges in the project area. It is a full diamond interchange, but operationally insufficient for the existing and proposed traffic (see Table 3, Average Annual Daily Traffic and Levels of Service), as queues in the existing

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condition extend onto the mainline of I-16 during peak traffic hours creating a situation where drivers have to stoop unexpectedly and contributes to the high rear-end crash rate within the project limits. The only other full interchange is the I-16/I-75 interchange, which is characterized as having poor sight distances, short driver decision time, and inadequate distances for weaving movements. Table 1 summarizes the type of interchanges and their existing characteristics.

Table 1: Existing Interchanges and Exit Ramp Summary

Location	Interchange Type	Description of Existing Ramps
I-16 at Coliseum Drive	Full Diamond	I-16 EB exit to Coliseum Dr (one lane) I-16 EB entrance from Coliseum Dr. (one lane) I-16 WB exit to Coliseum Dr (one lane) I-16 WB entrance from Coliseum Dr. (one lane)
I-16 at Second Street	Partial Cloverleaf	I-16 WB exit to 2nd Street (one lane loop)
I-16 at Spring Street	¾ Diamond with Loop	I-16 EB exit to Spring St. (two lanes) I-16 EB entrance from Spring St. (one lane) NB Spring St. to I-16 WB (one lane loop) SB Spring St. to I-16 WB (two lanes)
I-16 at I-75	Directional "Y" Type Interchange	I-75 NB to I-16 EB (two lanes) I-75 SB to I-16 EB (one lane) I-16 WB to I-75 NB (one lane) I-16 WB to I-75 SB (two lanes)
I-75 at Hardeman Avenue and Forsyth Street	Split Diamond Interchange	I-75 NB exit to Forsyth St (one lane) I-75 NB entrance from Hardeman Ave (one lane) I-75 SB exit to Hardeman Ave (one lane) I-75 SB entrance from Forsyth St (one lane)

The existing interchanges proposed for improvement include a number of major structures. There are 20 bridges within the project corridor. The existing bridges and their dimensions are shown in Table 2.

Table 2: Summary of Existing Structures (Bridges)

Location of Existing Bridges	Length (in feet)	Width (in feet)	Sufficiency Rating
David Lucas pedestrian bridge over I-75	498	11	N/A
Walnut Street over I-75	239	61	93.82
Riverside Drive over I-75	392	63	63.18
I-16 westbound to I-75 southbound ramp over I-75 northbound	198	40	90.38
I-75 northbound over ramp to I-16 eastbound and Norfolk-Southern Railroad	313	34	65.88
I-75 southbound over Norfolk-Southern Railroad @ MP 164.99 (within interchange)	247	35	55.80

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I-75 northbound over Norfolk-Southern Railroad @ MP 165.58	564	34.5	67.16
I-75 southbound over Norfolk-Southern Railroad @ MP 165.60	430	34.5	66.06
I-75 northbound to I-16 eastbound ramp over Norfolk-Southern Railroad	209	40	92.71
I-16 westbound to I-75 southbound ramp over ramp to I-16 eastbound and Norfolk-Southern Railroad	287	34	58.35
I-16 eastbound over Ocmulgee River	840	46	70.31
I-16 westbound over Ocmulgee River	816	50	73.31
I-16 eastbound over Spring Street	191	41	86.80
I-16 westbound over Spring Street	193	63	84.69
Second Street over I-16 and the Ocmulgee River	140	38	91.40
I-16 eastbound over Coliseum Drive	139	41	89.33
I-16 westbound over Coliseum Drive	139	41	89.33
Central of Georgia Railroad over I-16	226	N/A	N/A
Central of Georgia Railroad over I-16 westbound off-ramp to Coliseum Drive	42	N/A	N/A
Coliseum Drive over Ocmulgee River	422	77	81.20

Source: Georgia Department of Transportation.

C. OPERATIONAL DEFICIENCIES

The interchanges within the project area are generally not reflective of current interstate highway design standards. The existing interstate system in Macon was constructed in the mid 1960's. Interchange design at that point was a relatively new science. Many interchange configurations that were considered "state of the art" in the 1960's and 1970's are, by today's standards, considered unsafe and obsolete. With the exception of I-75 between I-16 and Hardeman Avenue, the section of freeway proposed for improvements has not received any substantial improvements (capacity or operational) since opening to traffic. Since design of these roadways in the early 1960's, the American Association of State Highway and Transportation Officials (AASHTO) criteria for the geometric design of highways has become more safety conscious. Differences between criteria found in the 1965 American Association of State Highway Officials (AASHO) "blue book" and the current 2004 AASHTO "green book" account for numerous locations within the project area where existing roadways do not meet current design standards. Major areas of concern in the existing project corridor are described in the following paragraphs.

Currently, the distance between the Spring Street and Second Street interchanges with I-16 is only 2,000 feet, and the distance between the Second Street and Coliseum Drive interchanges with I-16 is only 1,500 feet. The close proximity of these interchanges through downtown Macon contributes to the occurrence of crashes because large numbers of vehicles are entering and exiting the freeway within a relatively short section of roadway. Also, traffic flow and movements from downtown Macon are impacted by the partial interchanges on I-16 located at Second Street and Spring Street.

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In addition to the dense spacing of these interchanges, limited turning movement storage on surface streets within the interchanges is a persistent problem that creates congestion and contributes to deficient operations on the surface streets beyond exit and entrance ramps. A project to improve operations within this corridor would need to separate traffic movements that currently cause vehicles to weave in and out of travel lanes. Due to lane configurations and limited section lengths, the weaving movements between the I-16/I-75 interchange and the I-16/Coliseum Drive interchange are of particular concern for this project.

Also contributing to the operational deficiencies within the project corridor in the vicinity of the I-16/I-75 interchange is the inadequate sight distance for I-75 southbound traffic as the approach is made toward the I-16 split. Currently, a one-lane exit for I-16 eastbound traffic is developed on the left side of I-75, which is two-lanes at this location. The inadequate sight distance occurs as a result of the existing horizontal and vertical geometry of I-75 to the north of the interchange. Consequently, there is little driver decision time to enter the appropriate lane to proceed on eastbound I-16 or southbound I-75. This lack of adequate decision time and sight distance result in driver confusion and erratic weaving movements on this portion of I-75, which has contributed to the historically high crash rate for this section of freeway (see crash and injury data under Safety Considerations). Attempts to eliminate this problem with improved signage have not been successful. Consequently one of the main purposes of the proposed project is to address this operational deficiency.

AVERAGE ANNUAL DAILY TRAFFIC AND LEVELS OF SERVICE

The average annual daily traffic (AADT) for five cross-sections along the I-16/I-75 corridor was developed, and the peak hour traffic conditions associated with those five sections were evaluated to determine each section's worst-case level of service (LOS). The five sections included three along I-16 and two along I-75. Level of service is a qualitative measure of the operational efficiency of a roadway under AM and PM peak hour conditions as they are seen from the driver's perspective. There are a total of six different LOS designations, from A to F, with LOS A representing the best-case operational conditions with no delays in traffic and LOS F representing a complete breakdown in traffic flow.

The LOS for these sections was examined for three time frames and for two conditions. The LOS was evaluated for the existing conditions (2005), the build year (2016) under the no-build and build condition and the design year (2036) under the no-build and build condition. The peak hour traffic conditions for the five sections on I-16 and I-75, including collector-distributor roadways associated with the 2016/2036 build conditions, were evaluated using procedures contained in the latest edition of the Highway Capacity Manual, a publication by the Transportation Research Board in Washington, DC. Table 3 summarizes the cross-section AADT and the worst-case peak hour LOS for three sections along I-16 within the area of the proposed project. The LOS results in Table 3 are general and are not completely indicative of individual roadway segment LOS conditions experienced by the driver. For more detailed results, please refer to the Interchange Modification Report. This report provides peak hour LOS results for each segment of interstate and collector-distributor roadways for each direction, and

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for both the AM and PM time periods.

Table 3: Average Annual Daily Traffic and Levels of Service on I-16

Location	2005 Traffic Conditions AADT/LOS[1]/(N)[2]	2016 No-Build Condition AADT/LOS[1]/(N)[2]	2016 Build Condition AADT/LOS[1]/(N)[2]	2036 No-Build Condition AADT/LOS[1]/(N)[2]	2036 Build Condition AADT/LOS[1]/(N)[2]
From I-75 to Spring St.	80,460/C (6)	112,550/E (6)	112,550/B (7/6)	157,000/F (6)	157,000/C (7/6)
From Spring St. to Coliseum Dr.	52,120/D (4)	60,100/D (4)	60,100/A (4/7)	85,050/F (4)	85,050/B (4/7)
East of Coliseum Drive	35,680/B (4)	43,050/C (4)	43,050/C (4)	62,300/D (4)	62,300/D (4)

Source: Moreland Altobelli Associates, Inc. and the Georgia Department of Transportation.
Notes: [1]Worst case peak hour LOS as reported in – Interchange Modification Report, June 2009.
[2]The first number represents the number of mainline lanes and the second number represents the number of lanes that are part of the collector-distributor roadways and ramps.

The existing AADT on I-16 ranges between 35,680 to 80,460 vehicles per day (vpd) from east of Coliseum Drive to west of Spring Street. This segment of I-16 has a corresponding LOS ranging from B to D. These LOS values indicate that I-16 can generally meet the traffic demand for the existing year 2005.

For the 2016 no-build condition, the AADT on I-16 is projected to range from 43,050 east of Coliseum Drive to 112,550 west of Spring Street, representing deterioration in the overall level of service compared to 2005. The LOS on I-16 from I-75 to Spring St. would decrease from LOS C in 2005 to LOS E in 2016. Also, the LOS of I-16 east of Coliseum Drive would decrease from LOS B in 2005, to LOS F in 2016. The section of I-16 from Spring St. to Coliseum Drive would increase in volume, but the LOS would remain the same at LOS D.

For the 2016 build condition, the AADT on I-16 is projected to range from 43,050 east of Coliseum Drive to 112,550 west of Spring Street (see Figure 1, Build and Design Year Average Annual Daily Traffic - Build Condition). For the 2016 build condition, LOS would dramatically improve at two locations, while staying the same at the third. I-16 from I-75 to Spring Street would dramatically improve from LOS E to LOS B. I-16 from Spring St. to Coliseum Dr. would improve from LOS D to LOS B. LOS B means that traffic is free flowing although the presence of other vehicles on the road begins to be noticeable. Minor traffic disruptions would easily be absorbed into the traffic flow. Also, the LOS of I-16 from Spring St. to Coliseum Dr. would improved from LOS D to LOS A, which means traffic is free flowing. East of Coliseum Drive the LOS would remain LOS C.

The AADT on I-16 for the 2036 no-build condition is projected to range from 62,300 east of

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Coliseum Drive, to 157,000 west of Spring Street. The corresponding 2036 no-build LOS conditions indicate that two sections of I-16 would operate at a failing level of service (LOS F). LOS F would not meet the expectations of the motoring public and indicates a total breakdown in traffic flow. The last section of I-16 east of Coliseum Dr. would operated at LOS D, which is an acceptable level of service..

For the design year 2036 build condition, the AADT on I-16 is projected to range from 62,300 east of Coliseum Drive to 157,000 west of Spring Street. The LOS results indicate a dramatic improvement over the failing levels of service experienced under the 2036 no-build condition. Two of the locations experienced an improvement from LOS F to LOS C or B, while the third location remained the same at LOS D.

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Figure 1: Build and Design Year Average Annual Daily Traffic - Build Condition

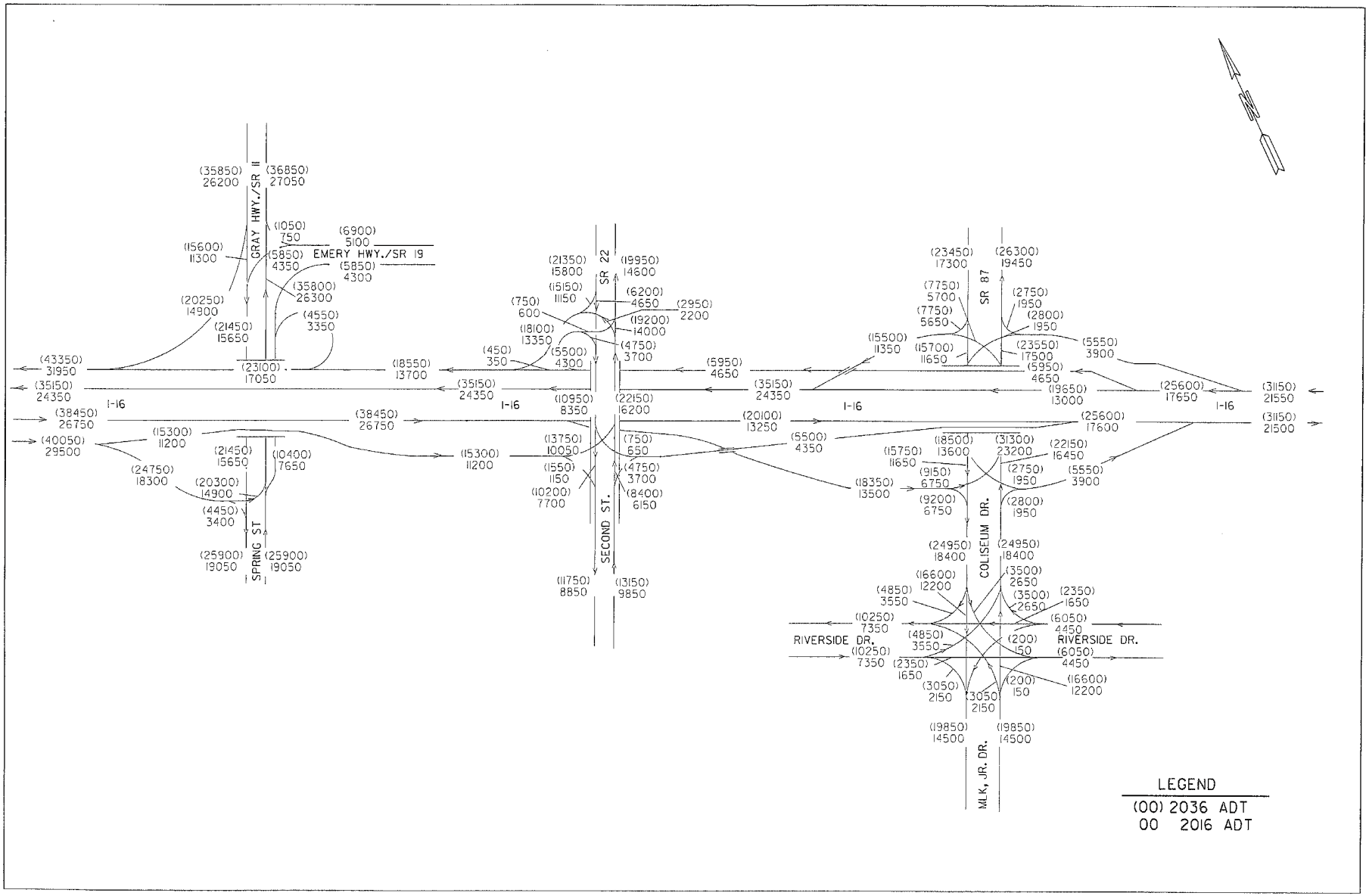

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Table 4 summarizes the AADT and the LOS for two sections along I-75 within the area of the proposed project. The 2005 existing AADT for I-75 had a range from 67,000 south of Pierce Avenue to 80,100 north of Hardeman Avenue. The LOS ranged from LOS D to LOS C along this section of I-75. These LOS values indicate that I-75 can generally meet the traffic demand for the existing year 2005.

Table 4: Average Annual Daily Traffic and Levels of Service on I-75

Location	2005 Existing Condition AADT/LOS[1]/(N)[2]	2016 No-Build Condition AADT/LOS[1]/(N)[2]	2016 Build Condition AADT/LOS[1]/(N)[2]	2036 No-Build Condition AADT/LOS[1]/(N)[2]	2036 Build Condition AADT/LOS[1]/(N)[2]
South of Pierce Ave.	67,000/D (4)	76,200/E (4)	76,200/C (7)	101,650/F (4)	101,650/D (7)
North of Hardeman Ave.	80,100/C (6)	99,650/D (6)	99,650/B (6/5)	144,950/F (6)	144,950/C (6/5)

Source: Moreland Altobelli Associates, Inc. and the Georgia Department of Transportation.
Notes: [1]Worst case peak hour LOS as reported in – Interchange Modification Report, June 2009.
[2]The first number represents the number of mainline lanes and the second number represents the number of lanes that are part of the collector-distributor roadways and ramps.

For the 2016 no-build condition, the AADT on I-75 would range from 76,200 to 99,650. The LOS on I-75, south of Pierce Avenue, would deteriorate from LOS D to LOS E. North of Hardeman Avenue, I-75 would deteriorate from LOS C to LOS D. For the 2016 build condition, the AADT on I-75 is projected to range from 76,200 south of Pierce Avenue to 99,650 north of Hardeman Avenue (see Figure 4, Build and Design Year Average Annual Daily Traffic - Build Condition). The LOS of I-75, south of Pierce Avenue, would be LOS C, and north of Hardeman Avenue, I-75 would operate at LOS B, representing an increase from LOS E and D, respectively.

For the 2036 no-build condition, the AADT on I-75 would range from 101,650 south of Pierce Avenue, to 144,950 north of Hardeman Avenue. The LOS for both of these sections of I-75 would be LOS F. For the design year 2036 build condition, the AADT on I-75 is projected to range from 101,650 south of Pierce Avenue to 144,950 north of Hardeman Avenue (see Figure 2). For the 2036 build condition, the LOS south of Pierce Ave. would be LOS D and north of Hardeman Ave., I-75 would operated at LOS C, representing an increased from LOS F and D, respectively.

As is indicated in the preceding tables, existing and future AADT volumes and the indicated peak hour LOS levels demonstrate the need for substantial improvements in the area of the I-16/I-75 interchange. The density of interchanges and the weaving and other traffic movements required by motorists to enter and exit I-16 in this area create substantial operational and safety problems. As a result of the planned interstate widening, construction of the collector-distributor roads, and interchange ramp improvements, higher traffic volumes could be accommodated at improved levels of service.

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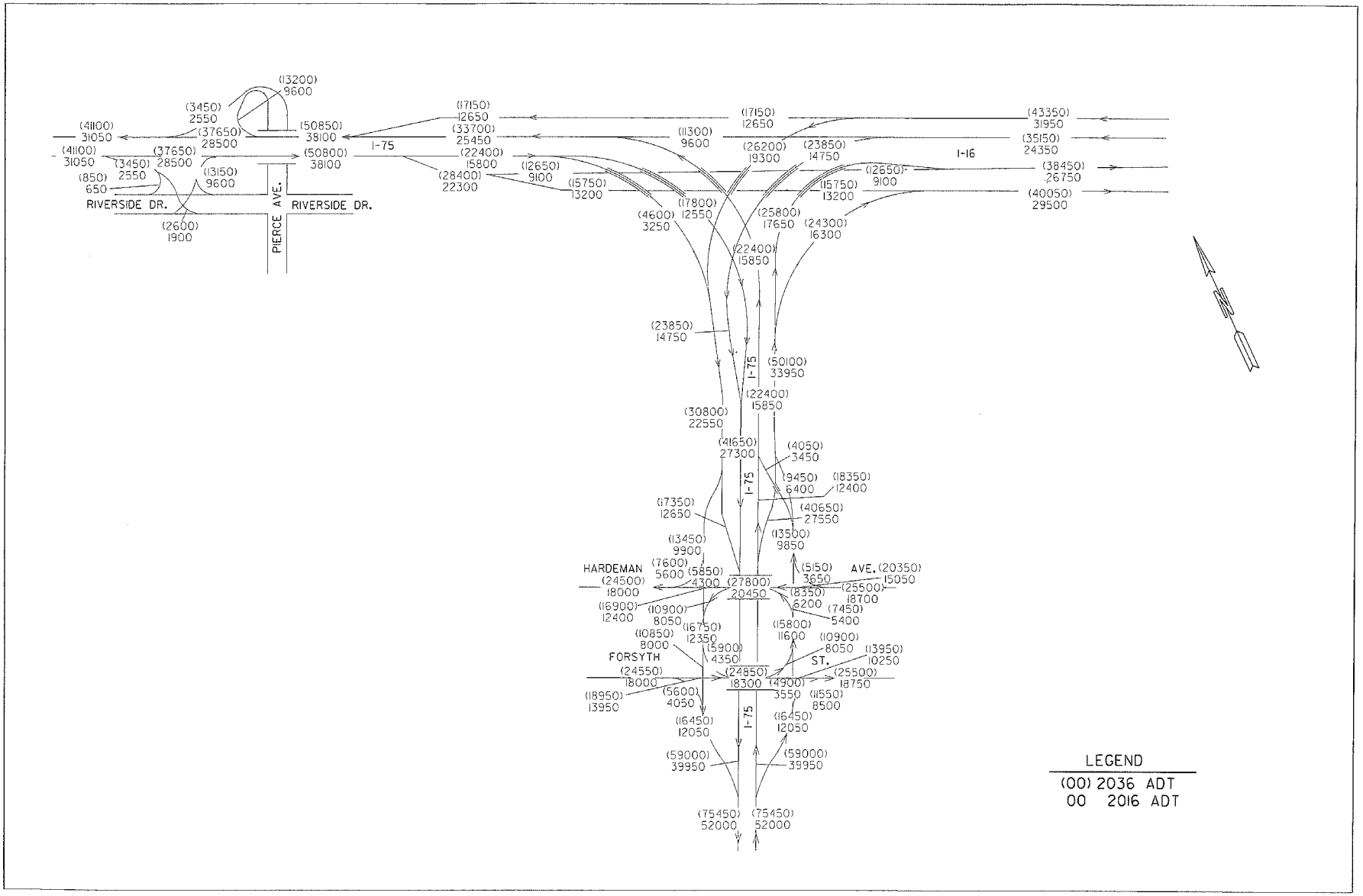
Figure 2: Build and Design Year Average Annual Daily Traffic - Build Condition



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FUTURE DESIGN HOUR TRAFFIC AND LEVELS OF SERVICE

Future year (2036) freeway and surface street operations within the study area roadway network were analyzed according to the latest version of the Highway Capacity Software. However, TRAF-CORSIM, a network computer simulation program was used to supplement the HCS analysis in selected critical freeway segments. Future traffic conditions were analyzed for the 2036 Build and No-Build Condition. The level of service was determined for basic freeway sections, ramp junctions, weaving sections, and signalized intersections within the project limits. The Build condition consists of the Preferred Concept (Alternative 9) and its related transportation improvements. Under the No-Build condition, no action would be taken to construct any transportation improvements.

Analysis of Basic Freeway Sections

No-Build and Build (Alternative 9) freeway segment analysis was conducted for one-way freeway segments of I-75 and I-16 using projected year 2036 traffic volumes and lane configurations. The level of service results with the associated direction and number of lanes for each segment are shown in Table 4: Year 2036 Freeway Segment LOS Analysis Results.

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Table 5: Year 2036 Freeway Segment LOS Analysis Results

Freeway Segments (From/To)	Dir.	No-Build			Build		
		No. of Lanes	AM (LOS)	PM (LOS)	No. of Lanes	AM (LOS)	PM (LOS)
NHIM0-0075-01 (214), P.I. No. 311560 (I-75/Hardeman Ave/Forsyth Street Interchange)*							
I-75 south of Forsyth St	NB	3	E	D	4	C	C
I-75 south of Forsyth St	SB	3	C	F	4	C	D
NHIM0-0016-01 (131), NHIM0-0075-02 (177), NH000-0016-01 (104), NHIM0-0016-01 (092) P.I. Numbers 311005, 311400, 311410, 311000							
I-75 from Hardeman Ave to I-16	NB	4	B	C	2	B	C
I-75 from I-16 to Hardeman Ave	SB	4	C	D	3	A	C
I-16 from I-75 to Spring St	EB	4	C	C	4	B	A
I-16 from Spring St to I-75	WB	3	D	F	3	A	C
I-16 from Spring St to Second St	EB	3	C	B	4	B	A
I-16 from Second St to Spring St	WB	2	C	F	3	A	C
I-16 from Second St to Coliseum Dr	EB	3	C	B	2	A	A
I-16 from Coliseum Dr to Second St	WB	3	C	E	3	A	C
I-16 east of Coliseum Dr	EB	2	C	C	2	C	C
I-16 east of Coliseum Dr	WB	2	B	D	2	B	D
I-75 from I-16 to Pierce Ave	NB	2	E	F	3	B	C
I-75 from Pierce Ave to I-16	SB	2	F	E	3	D	C
NHIM0-0075-02 (211), P.I. No. 312090 (Widening of I-75 from Pierce Ave to Arkwright Rd)							
I-75 north of Pierce Ave	NB	2	D	F	3	B	D
I-75 north of Pierce Ave	SB	2	F	D	3	C	C

* This project was analyzed with the recommended widening of I-75 mainline from Forsyth Street to Mercer University Drive included in the Build condition.

The majority of the freeway segments would operate at capacity or failing levels of service under the 2036 No-Build condition. The only segments that are shown to be operating at LOS D or better for both the AM and PM peak hour are I-75 from Hardeman Avenue to I-16 and I-16 east of Coliseum Drive.

However, the TRAF-CORSIM simulation model of the No-Build condition indicates that only I-16 east of Coliseum Drive would actually operate at an acceptable level of service. The simulation shows that the lack of capacity on I-75 south of Forsyth Street impedes the operations upstream on the interstate, causing a failing level of service on I-75 between I-16 and Hardeman Avenue during the AM peak hour. It is recommended that the I-75 mainline from Forsyth Street to Mercer University Drive be widened to four lanes in each direction.

The simulation also shows that the lack of capacity for traffic exiting I-16 eastbound at Spring

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Street creates back-ups through the I-16/I-75 interchange and along northbound I-75 between Hardeman Avenue and I-16 during the PM peak hour. The Alternative 9 Build condition drastically improves the overall capacity of the transportation corridor compared with the No-Build condition.

Analysis of Ramp Junctions

Ramp junction analysis was performed for all ramp junctions under the year 2036 No-Build alternative and the preferred Build alternative. Results of all the ramp junction analysis are shown in Table 5: Year 2036 Ramp Junction LOS Analysis Results.

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Table 6: Year 2036 Ramp Junction LOS Analysis Results

Ramp Junctions	No-Build		Build	
	AM (LOS)	PM (LOS)	AM (LOS)	PM (LOS)
NHIM0-0075-01 (214), P.I. No. 311560 (I-75/Hardeman Ave/Forsyth Street Interchange)*				
I-75 northbound diverge to Forsyth Street	F	D	C	B
Forsyth Street Ramp merge with I-75 southbound	C	F	C	D
NHIM0-0016-01 (131), NHIM0-0075-02 (177), NH000-0016-01 (104), NHIM0-0016-01 (092) P.I. Numbers 311005, 311400, 311410, 311000				
Hardeman Avenue merge with I-75 northbound	C	C	B	B
I-75 southbound CD diverge to Hardeman Ave			D	B
I-75 southbound diverge to Hardeman Ave	C	D		
I-75 northbound diverge to I-16 eastbound	C	D	B	C
I-75 southbound CD merge with I-75 southbound			A	B
I-16 westbound merge with I-75 southbound	D	E	A	B
I-16 eastbound diverge to Spring Street	C	C	D	B
I-16 eastbound CD diverge to Spring St.			A	B
Spring Street merge with I-16 eastbound	C	C		
I-16 eastbound diverge to Coliseum Drive	C	C	C	B
I-16 westbound CD merge with I-75 southbound			C	B
I-75 northbound CD diverge to I-16 eastbound CD			B	C
Second Street merge with I-16 eastbound			B	A
Coliseum Drive merge with I-16 eastbound	B	B	C	B
I-16 westbound diverge to Coliseum Drive	B	D	B	D
I-16 westbound diverge to westbound CD			B	D
I-16 westbound diverge to Second Street	C	F		
Coliseum Drive merge with I-16 westbound	C	E	A	B
I-16 westbound CD diverge to I-75 northbound CD			B	B
Spring Street southbound merge with I-16 westbound	D	F		
Spring Street northbound merge with I-16 westbound	C	F		
I-16 westbound diverge to I-75 southbound	F	F	A	B
I-16 west-to-north CD merge with I-75 northbound	F	F	B	B
I-16 eastbound merge with I-75 northbound	D	D	B	A
I-16 westbound merge with I-75 northbound	F	F	A	B
NHIM0-0075-02 (211), P.I. No. 312090 (Widening of I-75 from Pierce Ave to Arkwright Rd)				
I-75 southbound diverge to I-16 eastbound	F	F	D	D
I-75 northbound diverge to Pierce Avenue	F	F	B	C
Pierce Avenue merge with I-75 northbound	D	F	B	C
I-75 southbound diverge to Pierce Avenue	F	E	C	C
Pierce Avenue merge with I-75 southbound	F	D	C	C

* This project was analyzed with the recommended widening of I-75 mainline from Forsyth Street to Mercer University Drive included in the Build condition.

The ramp junctions have failing levels of service at many of the same locations as the failing freeway segments, indicating that the future traffic volume cannot be handled under a No-Build alternative. With the exception of the I-16 eastbound diverge to Coliseum Drive, the only ramp junctions to operate at a LOS D or better during both the AM and PM peak hours are along I-75

between Hardeman Avenue and I-16, along I-16 between I-75 and Spring Street, and along I-16 east of Coliseum Drive. These also happen to be the only three freeway segments found to operate at LOS D or better under the HCS analysis. Similar to the freeway segment analysis, all of the ramp junctions under the Build condition (Alternative 9) would operate at LOS D or better.

Analysis of Weaving Areas

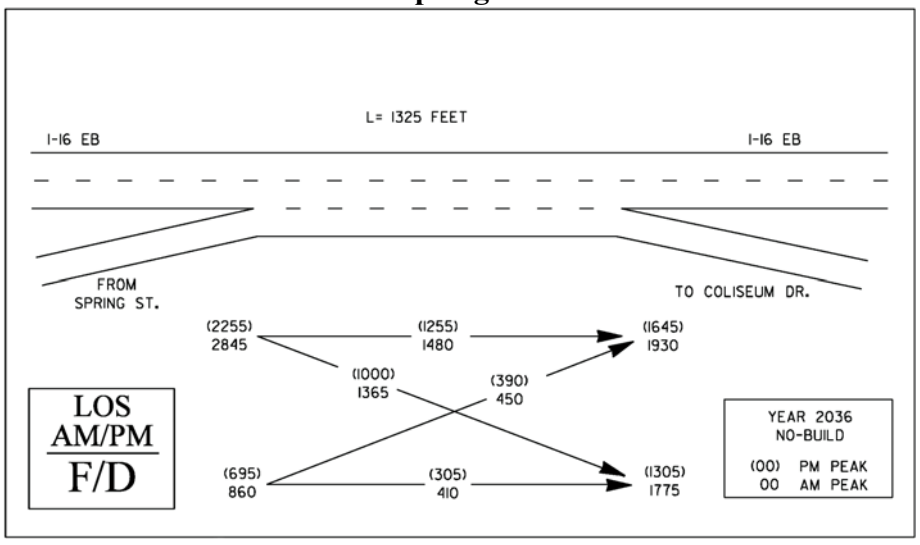
Two weaving areas on I-16 were analyzed under the 2036 No-Build condition. The results are provided below in Table 6: Year 2036 No-Build Weaving Area LOS Analysis Results. For the No-Build condition, both were identified and analyzed as type "A" weaving areas, or *ramp-weave sections*, consisting of an on-ramp closely followed by an off-ramp, where an auxiliary lane joins the two. The geometric configuration of a type "A" weave must require one vehicular lane transition to successfully complete the weaving maneuver. For a type "A" weave analysis, the length of the weaving segment cannot exceed 2,500 feet. The two weaving segments for the No-Build condition, shown in Figure 4: Weaving Diagram – I-16 Eastbound between Spring Street and Coliseum Drive and Figure 5: Weaving Diagram - I-16 Westbound between Coliseum Drive and Second Street, are projected to operate at LOS F during either the AM or PM peak hour.

Table 7: Year 2036 No-Build Weaving Area LOS Analysis Results

Freeway	Weaving Area Limits (From/To)	Type	Dir.	N*	Length	AM	PM
I-16	Spring Street on-ramp to Coliseum Drive off-ramp	A	EB	3	1325	F	D
	Coliseum Drive on-ramp to Second Street off-ramp	A	WB	3	1200	E	F

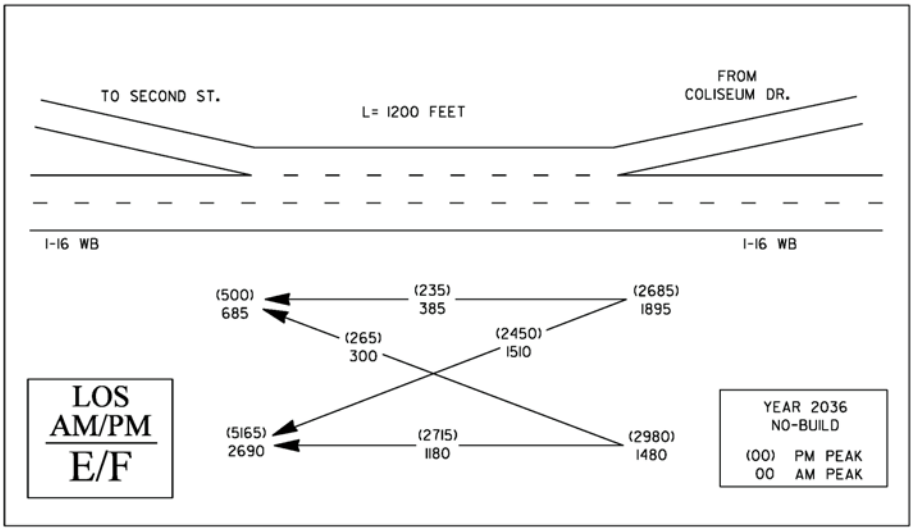
* Indicates the number of lanes for that particular segment.

Figure 3 : Weaving Diagram
I-16 Eastbound between Spring Street and Coliseum Drive



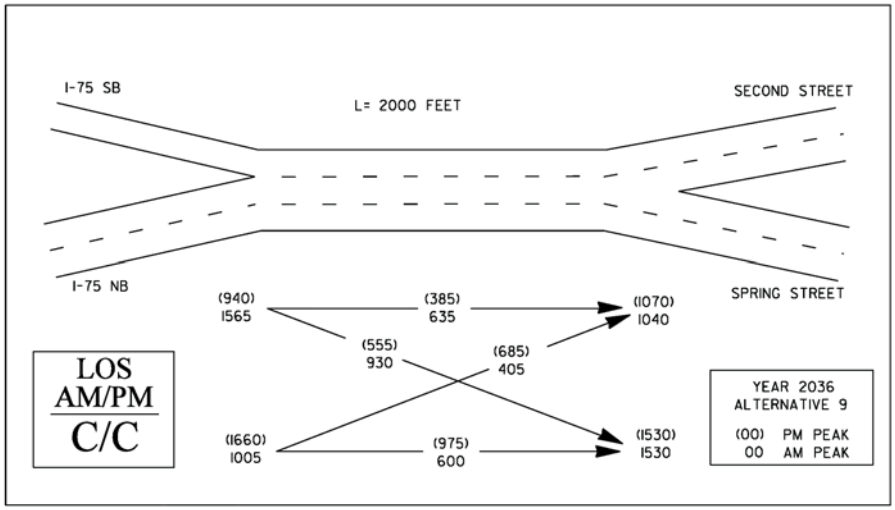
Attachment #1 – Need and Purpose

Figure 4: Weaving Diagram
I-16 Westbound between Coliseum Drive and Second Street



For the Build Condition, the change in configuration of the freeway system and the addition of a collector-distributor (CD) road system has eliminated the level and type of weaving traffic that occurs along the I-16 mainline. The proposed CD system allows traffic that would normally utilize I-16 to utilize the CD roads for ramp movements. The type "A" weaves that exist in the No-Build condition no longer exist in the Build (Alternative 9) condition; however, a type "B" weave exists on the I-16 eastbound CD system between the I-16/I-75 interchange and the Second Street off-ramp. This segment is projected to operate at LOS C for both the AM and PM peak periods, as shown in Figure 6: Weaving Diagram – I-16 Eastbound CD between I-75 and Spring Street.

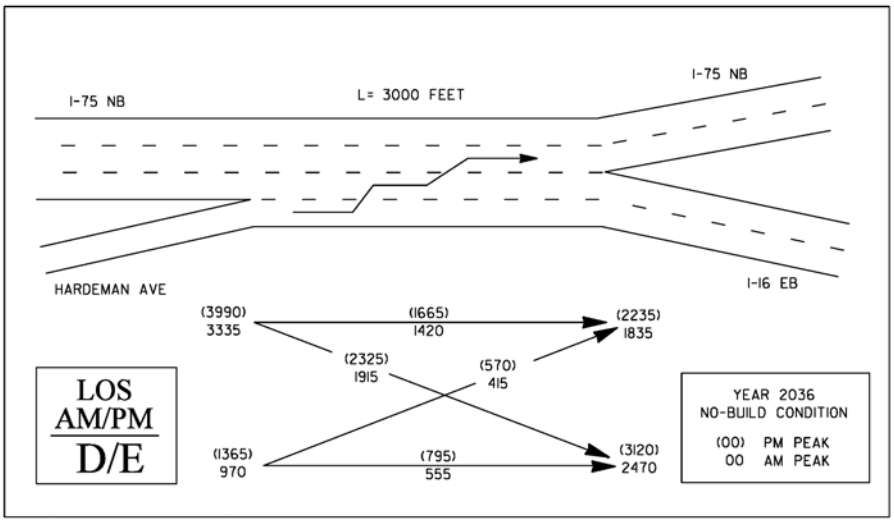
Figure 5: Weaving Diagram
I-16 Eastbound CD between I-75 and Spring Street



Attachment #1 – Need and Purpose

Under the No-Build condition, the weaving segment of I-75 northbound between the Hardeman Avenue entrance ramp and I-16 split was evaluated even though the length of the weave exceeds 2,500 feet. This weave is a type "C", where motorists must transition two lanes to continue on I-75 northbound. The results of the analysis indicate that this weave is operating at a LOS D and LOS E during the AM and PM peak hours, respectively, as shown in Figure 7: Weaving Diagram - I-75 Northbound between Hardeman Avenue and I-16.

Figure 6: Weaving Diagram
I-75 Northbound between Hardeman Avenue and I-16



Under the Build condition, this weave is eliminated; however, Alternative 9 has a weaving segment on the I-75 northbound CD road between Hardeman Avenue and Spring Street/Second Street. This weaving segment will operate at LOS C during both the AM and PM peak hours as shown in Figure 8: Weaving Diagram – I-75 Northbound CD between Hardeman Avenue and Spring Street/Second Street.

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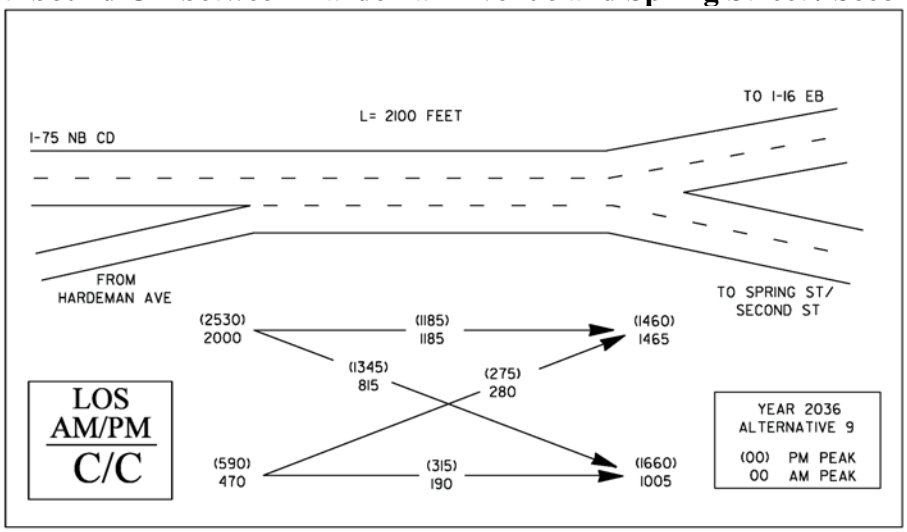
Figure 7: Weaving Diagram
I-75 Northbound CD between Hardeman Avenue and Spring Street / Second Street



Analysis of Signalized Intersections

Intersection capacity analysis for 2036 No-Build and Build conditions was conducted and the results are summarized in Table 7: Year 2036 Build Intersection LOS and (Vehicle Delay) Analysis Results.

Table 8: Year 2036 Build
Intersection LOS and (Vehicle Delay) Analysis Results*

Intersection	No-Build		Build	
	AM LOS (delay)	PM LOS (delay)	AM LOS (delay)	PM LOS (delay)
Spring Street @ I-16 westbound on-ramp/Emery Hwy	F (119.8)	B (19.9)	B (16.8)	B (16.1)
Spring Street @ I-16 eastbound off-ramp	E (79.4)	E (73.8)	C (33.8)	C (34.9)
Second Street @ I-16 eastbound off-ramp			C (23.5)	C (32.1)
Second Street @ I-16 westbound off-ramp **	F (184.0)	F (704.4)	B (17.7)	B (15.1)
Coliseum Drive @ I-16 westbound off-ramp **	F (1301)	F (>12000)	C (23.6)	D (38.4)
Coliseum Drive @ I-16 eastbound off-ramp	F (119.4)	F (446.4)	D (42.0)	D (50.3)
Coliseum Drive @ Riverside Drive	B (19.7)	E (61.7)	C (21.8)	D (54.7)

* Values are given in seconds per vehicle delay
** Unsignalized analysis for the No-Build Condition only

The results indicate that the proposed intersections would operate at an acceptable LOS D or better under the year 2036 Build condition. These levels of service indicate an improvement compared to the year 2036 No-Build analysis, in which all but one intersection would operate at

LOS E or F during one or both peak hours.

In summary, future traffic conditions with regards to the overall freeway system, CD system, and surface street network operate significantly better under the proposed Build scenario. The full extent of the project impact is measured in terms of the capacity and improved operational level of service on key freeway segments, weaving segments, and ramp junctions.

D. SAFETY CONSIDERATIONS

Crash data also indicates the need for major improvements to the congested I-16/I-75 interchange. From 2001 through 2006, there were 2,788 crashes on the mainline of the two interstates (see Table 1.4, Crash, Injury, and Fatality Rates for I-16/I-75). As a result of these crashes, 1,231 injuries and 3 fatalities was recorded in the proposed project area. In 2006, the most recent year for crash data tabulation, there were 436 crashes on the combined I-75 and I-16 interstates of the project area. For 2006, the crash rate on the portions of I-16 and I-75 to be reconstructed was approximately 1.64 times the statewide rate for comparable interstates.

Table 5: Crash, Injury, and Fatality Rates for I-16/I-75

Year	Total No. of Crashes	I-16 Crash Rate	Statewide Crash Rate	Total No. of Injuries	I-16 Injury Rate	Statewide Injury Rate	Total No. of Fatalities	I-16 Fatality Rate	Statewide Fatality Rate
2001	255	574	201	160	360	51	1	2	0.81
2002	280	654	204	152	355	49	0	0	0.54
2003	264	718	200	125	340	48	1	3	0.71
2004	247	591	190	112	268	44	0	0	0.59
2005	250	480	206	93	179	49	0	0	0.77
2006	215	409	200	87	165	46	0	0	0.73
Year	**Total No. of Crashes**	**I-75 Crash Rate**	**Statewide Crash Rate**	**Total No. of Injuries**	**I-75 Injury Rate**	**Statewide Injury Rate**	**Total No. of Fatalities**	**I-75 Fatality Rate**	**Statewide Fatality Rate**
2001	246	269	201	115	125	51	1	1	0.81
2002	237	253	204	83	89	49	0	0	0.54
2003	244	254	200	84	87	48	0	0	0.71
2004	144	155	190	54	58	44	0	0	0.59
2005	185	209	206	85	96	49	0	0	0.77
2006	221	247	200	81	90	46	0	0	0.73

All Rates are crashes, injuries, or fatalities per 100 million travel miles.
Source: Georgia Department of Public Safety, Crash Reporting Unit.

In 2006, there were 168 injuries resulting from traffic crashes on the combined I-75 and I-16 interstates in the project area. In 2006, the injury rate on the portions of I-16 and I-75 to be reconstructed was approximately 2.77 times the statewide rate for comparable interstates.

The combined crash data for the proposed reconstruction of the I-16/I-75 interchange and three additional interchanges indicates that both crashes and injuries exceed the statewide rate on these two urban interstates. One fatality occurred in 2003 and contributed to a fatality rate of three (3) fatalities per 100 million vehicle miles of travel. Two other fatalities occurred in 2001

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on both I-75 and I-16 and were computed at the rate of one (1) and two (2) fatalities per 100 million vehicle miles, respectively. The statewide rate for fatalities for comparable interstates in 2003 was 0.71 and 0.81 in 2001. A separate evaluation of the crashes on these two interstates indicates distinctive patterns of crashes indicating different causes for the high number of crashes on each of the freeways. This evaluation is presented in the paragraphs below.

An analysis of the 2006 crash data on the I-16 portion of the project indicates that 50 percent of these crashes were rear-end collisions. This high number of rear-end collisions coupled with the high number of injuries as a result of these crashes indicates that the traffic congestion on I-16 in downtown Macon results in a high number of moving vehicles crashing into decelerating or stopped vehicles. These types of crashes are common when vehicles exiting I-16 queue onto the mainline of the interstate. This situation can occur unexpectedly for drivers on the interstate, causing rear-end collisions because driver decision time is too short to react properly. The crash data supports the need to separate local traffic destined for the downtown Macon exits from through traffic on I-16. Through traffic would then encounter less decelerating or stationary traffic on the mainline of I-16.

A further evaluation of the crash data on the I-75 portion of the project indicates that rear-end collisions accounted for 30 percent of the crashes as opposed to 50 percent on I-16. Sideswipe/angle collisions accounted for 38 percent of all crashes on I-75 and 30 percent on I-16. In addition, a number of crashes on I-75 involved cars colliding with objects off the road. This crash data is suggestive of problems with weaving, sight distances, and short driver decision time. One previous example of this occurs on southbound I-75 just north of the I-16 split. Motorists' view of the approaching I-16/I-75 split is obscured due to the existing horizontal and vertical geometry entering this interchange. At this point drivers have very little decision time to weave into the appropriate lane to continue on I-75 south or to transition to eastbound I-16. A second example would be the merge of westbound I-16 with southbound I-75. Driver decision time and weaving opportunities are inadequate for drivers exiting on Hardeman Avenue or Forsyth Street. The proposed improvements will address these existing conditions.

A summary of the crash data is illustrated on Figure 1.4: I-16 and I-75 Crash Data Diagram. This diagram shows the location that the crashes are occurring on the I-75 and I-16 mainlines. The section of I-16 that has the most crashes for all six years is between I-75 and the Spring Street Interchange. Most of the crashes occur prior to the gore point, which is the final decision point between exiting to Spring Street and continuing on I-16 eastbound. The weaving section on I-16 eastbound between I-75 and Spring Street is a "Type C" weave, which is characterized as a weaving section that requires two vehicular lane changes to successfully complete the weaving maneuver. As shown in Figure 8, crashes can be directly attributed to an inability to negotiate lane changes in this weaving section.

The section of I-16 that has the second highest number of accidents is the merge point between I-16 westbound mainline and the Spring Street on-ramps. Currently, the loop ramp from Spring Street joins the westbound mainline with a parallel acceleration lane that abruptly ends with a short taper. The tapered end of the lane is hidden from sight by the vertical crest of the I-16 bridge over Spring Street. At this point, drivers have very little decision time to merge onto I-

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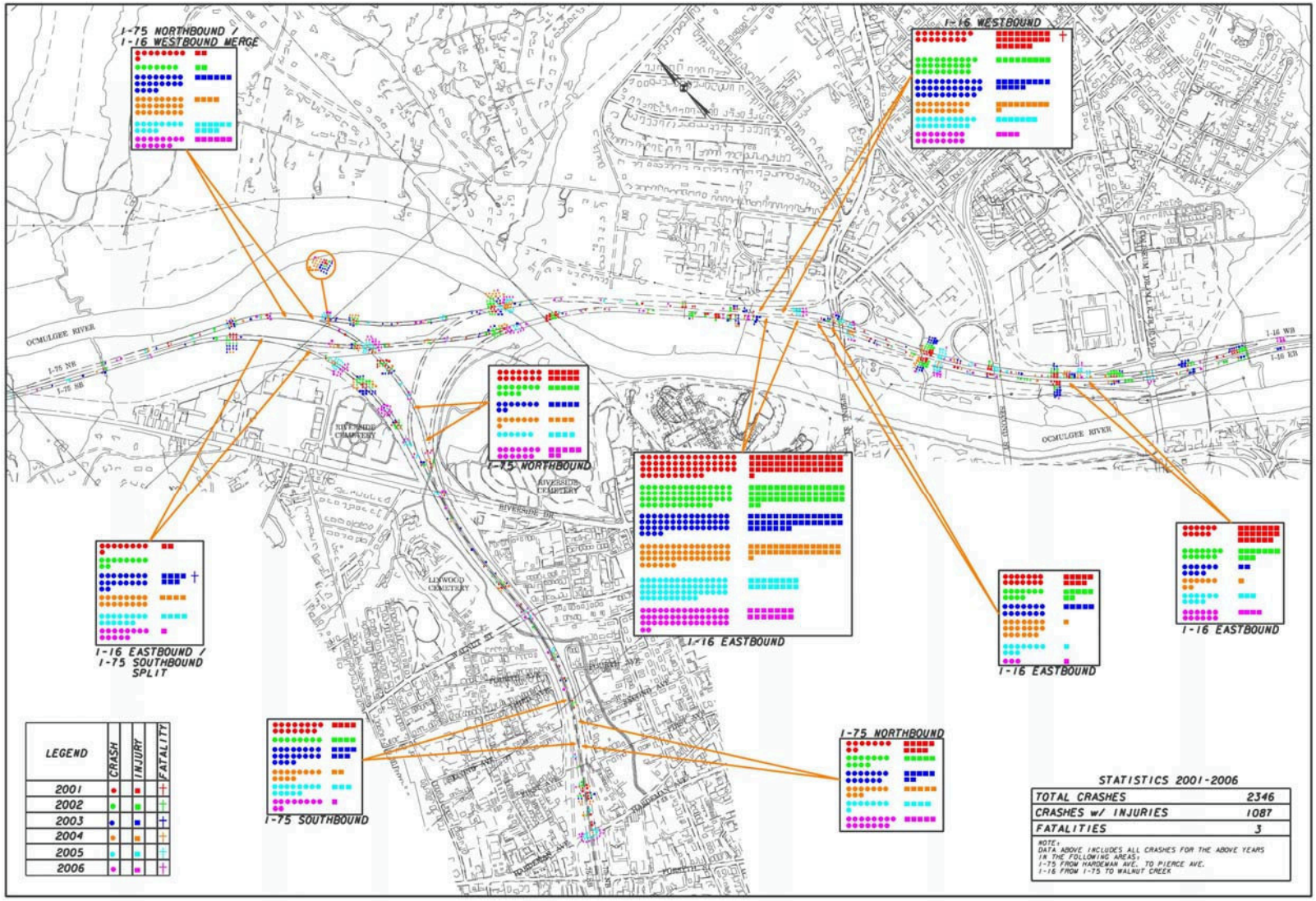
16. Additionally, this merge point is closely followed by the two-lane ramp merge from southbound Spring Street. The two-lane on-ramp merges the left lane with I-16 instead of the right lane. Therefore motorists in the left lane are forced to merge with I-16 or merge into the right lane. This merge does not give drivers enough decision time or lane-changing opportunities and frequently results in sideswipe accidents.

Attachment #1 – Need and Purpose
Figure 8: I-16 and I-75 Crash Data Diagram



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It is anticipated that the operational efficiency improvements proposed for the I-16/I-75 interchange as well as improvements to other interchanges in the project area would create safer facilities for the motoring public. The increase in operational efficiency on both I-16 and I-75 would allow an improved LOS with less congestion, reduced driver stress, improved sight distances, and reduced weaving movements/conflict points, which should result in fewer crashes.

E. STORM EVACUATION

In 1999, Hurricane Floyd threatened the Georgia coast and evacuation of coastal areas was advised. Eastbound traffic was halted on I-16 and all lanes were used for the westbound evacuation. The I-16/I-75 interchange, which currently provides a single lane for the movement from I-16 westbound to I-75 northbound, proved to be a major bottleneck for traffic headed away from coastal areas (see Figure 3, Regional Location Map). As a result, GDOT commissioner Wayne Shackelford announced to the *Atlanta Journal Constitution* that plans were underway to re-engineer this interchange to improve future evacuations.

The proposed project directly addresses the hurricane evacuation route capacity issue by widening the ramp from I-16 westbound to I-75 northbound from one to two lanes. Other improvements within the project corridor that would benefit hurricane evacuation include:

- Construction of the westbound CD road adjacent to I-16. The two-lane CD road would provide additional capacity through downtown Macon in an evacuation event.
- Construction of 12-foot shoulders on the interstate mainline. The primary purpose for the wide, paved shoulders is to provide refuge for disabled vehicles and access for emergency vehicles. During an evacuation event, the shoulders could be utilized for additional capacity through downtown Macon.

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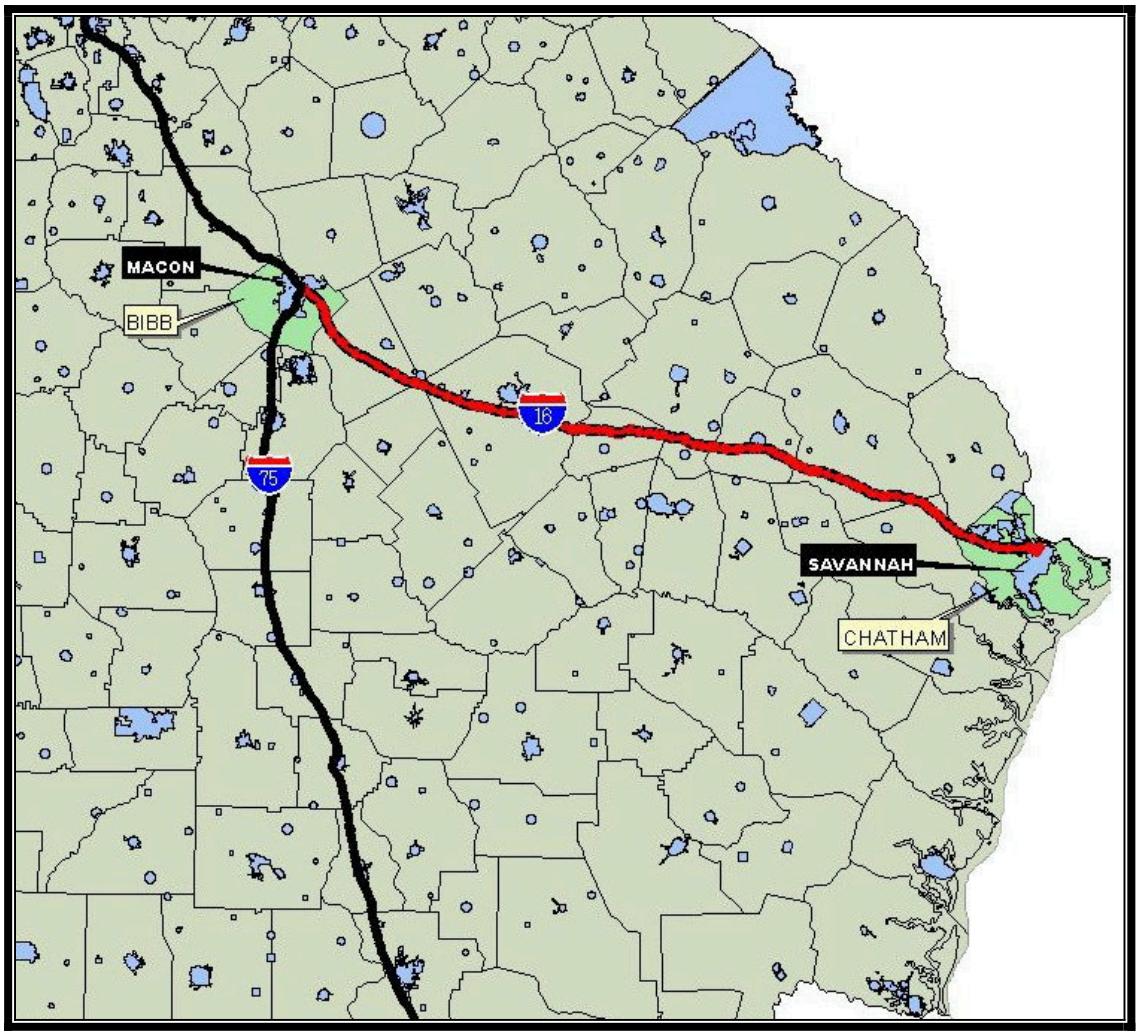
Figure 9: Regional Location Map



F. LOGICAL TERMINI

The northwestern logical terminus for the proposed improvements to the I-16/I-75 interchange is a point just southeast of the I-75/Pierce Avenue interchange, which is approximately 1.8 miles to the northwest of the I-16/I-75 interchange. The Pierce Avenue interchange is located at a sufficient distance from the I-16/I-75 interchange such that all operational deficiencies identified within the I-16/I-75 interchange project would be addressed prior to reaching this location. Therefore, improvements to the I-75/Pierce Avenue interchange are not needed to improve the operations of the I-16/I-75 interchange. The proposed improvements to correct the horizontal and vertical alignment inadequacies at the I-16/I-75 interchange southbound split, coupled with a sight distance problem for southbound traffic approaching the I-16/I-75 interchange at the I-75 bridge over the Norfolk Southern Railroad, requires that improvements to I-75 be extended back to a point just southeast of Pierce Avenue. These improvements are necessary to correct sight distances and to lengthen driver decision time for traffic making the transition from southbound I-75 to eastbound I-16. The reduced sight distance results in erratic

weaving and preventable crashes. In order to address this condition, the I-75 profile and alignment must be altered to a point well north of the bridge over the railroad. Additionally, a separate project is underway to improve the I-75/Pierce Avenue interchange and the section of I-75 between the I-75/Pierce Avenue interchange and the I-75/Arkwright Road interchange [Project NHIM0-0075-02(211)]. This project is currently in the right-of-way phase and anticipated to be constructed prior to construction of the I-16/I-75 project. The proposed I-16/I-75 project would match the six-lane section of the Pierce to Arkwright project to provide lane continuity on I-75; therefore the southeast terminus of this project would be the logical northwestern terminus of the I-16/I-75 project.

The eastern logical terminus for the proposed improvements to I-16 is east of the I-16/Coliseum Drive interchange, which is located approximately 1.6 miles southeast of the I-16/I-75 interchange. The identified problems are the signage, weaving movements between closely spaced interchanges, and exiting traffic queuing onto the mainline of I-16. The completion of the proposed improvements would address these problems.

The next I-16 interchange east of Coliseum Drive is I-16/SR 87. This interchange is located several miles to the east of Coliseum Drive. No weaving or other operational deficiencies related to the I-16/I-75 interchange have been identified east of the I-16/Coliseum Drive interchange. Operational improvements would, therefore, end at the I-16/Coliseum Drive interchange, with the tapering of lanes and restriping continuing for approximately 4,300 feet east of this interchange to accommodate the transition back to the existing lane configuration of I-16.

The 2005 AADT on I-16 west of the Coliseum Drive interchange was 52,120 (LOS D in 2005). The 2005 AADT east of the Coliseum Drive interchange was 35,680 (LOS B in 2005). As this traffic data illustrates, the Coliseum Drive interchange handles a substantial volume of ingress/egress traffic, and traffic volumes on the interstate mainline drop by 32% east of this interchange. This break in traffic volume combined with the absence of the weaving problem east of the I-16/Coliseum Drive interchange makes this interchange the logical eastern project terminus.

Currently I-75 Southbound (SB) has a left hand access at the I-16 interchange, which creates reduced driver expectancy, poor lane continuity, and unacceptable weaving movements on mainline I-75 SB between Hardeman Avenue and I-16. In order to correct these operational deficiencies, the southern logical terminus for the proposed improvements to the I-16/I-75 interchange is north of the I-75/Hardeman Avenue/Forsyth Street interchange, which is approximately 1.1 miles south of the I-16/I-75 interchange. The I-75/Hardeman Avenue/Forsyth Street interchange is located a sufficient distance south of the I-16/I-75 interchange such that all operational deficiencies identified in the I-16/I-75 interchange would be addressed prior to this location. Therefore, improvements south of the I-75/Hardeman Avenue/Forsyth Street interchange are not necessary to improve operations of the I-16/I-75 interchange. A separate GDOT project to improve the I-75/Hardeman Avenue/Forsyth Street interchange is also planned, which concentrates primarily on the ramp location, access issues, and capacity and operations of Hardeman Avenue and Forsyth Street rather than I-75 mainline operations.

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G. RELATIONSHIP TO STATEWIDE AND LOCAL TRANSPORTATION PLANS

The proposed improvements to the I-16/I-75 interchange from Pierce Avenue to the northwest, Coliseum Drive to the east, and Hardeman Avenue to the south, are included in the Macon Area Transportation Study's (MATS) Adopted Transportation Plan and the Transportation Improvement Program (TIP). Project NHIM0-0016-01(092), the widening/reconstruction of I-16 from SR 11 to SR 87, is in the TIP as MCN-10. Project NHIM0-0016-01(131), the widening of the I-16 bridge at Martin Luther King Drive, is in the TIP as MCN-66. Project NHIM0-0075-02(177), the widening/reconstruction of I-75 from County Route 478 to I-16, is in the TIP as MCN-13. Project NH000-0016-01(104), the reconstruction of the I-16/I-75 interchange, is in the TIP as MCN-9.

OTHER ROAD IMPROVEMENT PROJECTS IN THE AREA

Other road improvement projects in the area of the proposed project include the proposed improvements to the I-75/Hardeman Avenue/Forsyth Street interchange (see Figure 10). This planned improvement concentrates primarily on the ramp location, access issues, and capacity and operations of Hardeman Avenue and Forsyth Street rather than I-75 mainline operations. This project, IMNH0-0075-01(214), is in the TIP as MCN-4, and is also identified as P.I. No. 311560. Improvements proposed with P.I. No. 311560 are restricted to the connecting ramps between Hardeman Avenue and Forsyth Street, and the addition of a dual right turn from the northbound I-75 exit ramp to eastbound Forsyth Street. These improvements are beyond the limits of construction for the I-16/I-75 project (PI 311410), which will be restricted to the ramps north of Hardeman Avenue. The improvements with these projects are not inter-dependant and neither project would preclude work by the other. This project is currently in Long Range and is still in the concept phase.

Project NHIM0-0075-02(211) proposes to reconstruct I-75 from a four-lane road to a six-lane road from Pierce Avenue to Arkwright Road. Preliminary Plans for this project are complete and right-of-way acquisition is in-progress. Construction is currently programmed for FY 2010 and the project letting is scheduled for November 2009. A sound barrier was determined to be necessary along I-75 northbound adjacent to this project [NHIM0-0075-02(211)] and the adjacent part of the I-75/I-16 project [NHIM0-0075-02(177)]. The Department is proposing to construct the entire length of this barrier with project NHIM0-0075-02(211). There are not any existing or proposed utilities within the interstate right-of-way that require coordination between these projects. Interstate lighting will be coordinated as part of the final design process for both projects.

Project STP-000E(198) proposes to construct the Ocmulgee Heritage Greenway multi-use path along the Central of Georgia Railroad on the southwest side of the Ocmulgee River. This project is presently in the concept development phase.

Project STP-3223(4)/BRMLB-3223(6), STP-3223(2), STP-3223(5), and STP-0000-00(835) would widen Jeffersonville Road from a two-lane rural section to a five-lane urban section from Emery Highway (US 23, US Alt 129, SR 19, SR 87) to Emery Road (US 80, SR 57), and would widen Millerfield Road from a two-lane rural section to a five-lane urban section from

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Jeffersonville Road to New Clinton Road. This project is currently in the preliminary engineering phase and right-of-way is programmed for FY 2009.

Projects NH000-0016-01(191) proposes to extend Eisenhower Parkway from its existing terminus at Lower Boundary Street in East Macon over to Emery Highway on the north side of I-16. This project is presently in the environmental phase and the specific project alternative has not yet been determined; therefore, the location of this project has not been identified on Figure 5.

H. ENVIRONMENTAL JUSTICE COMMUNITIES

Within the project corridor, one community (Pleasant Hill) was determined to contain both low income and minority populations. The Pleasant Hill neighborhood is located along both sides of I-75 between Hardeman Avenue and Walnut Street. The neighborhood was divided by the original interstate construction in the 1960's. This community will be studied and considered for potential Environmental Justice (EJ) concerns as required by Executive Order (EO) 12898.

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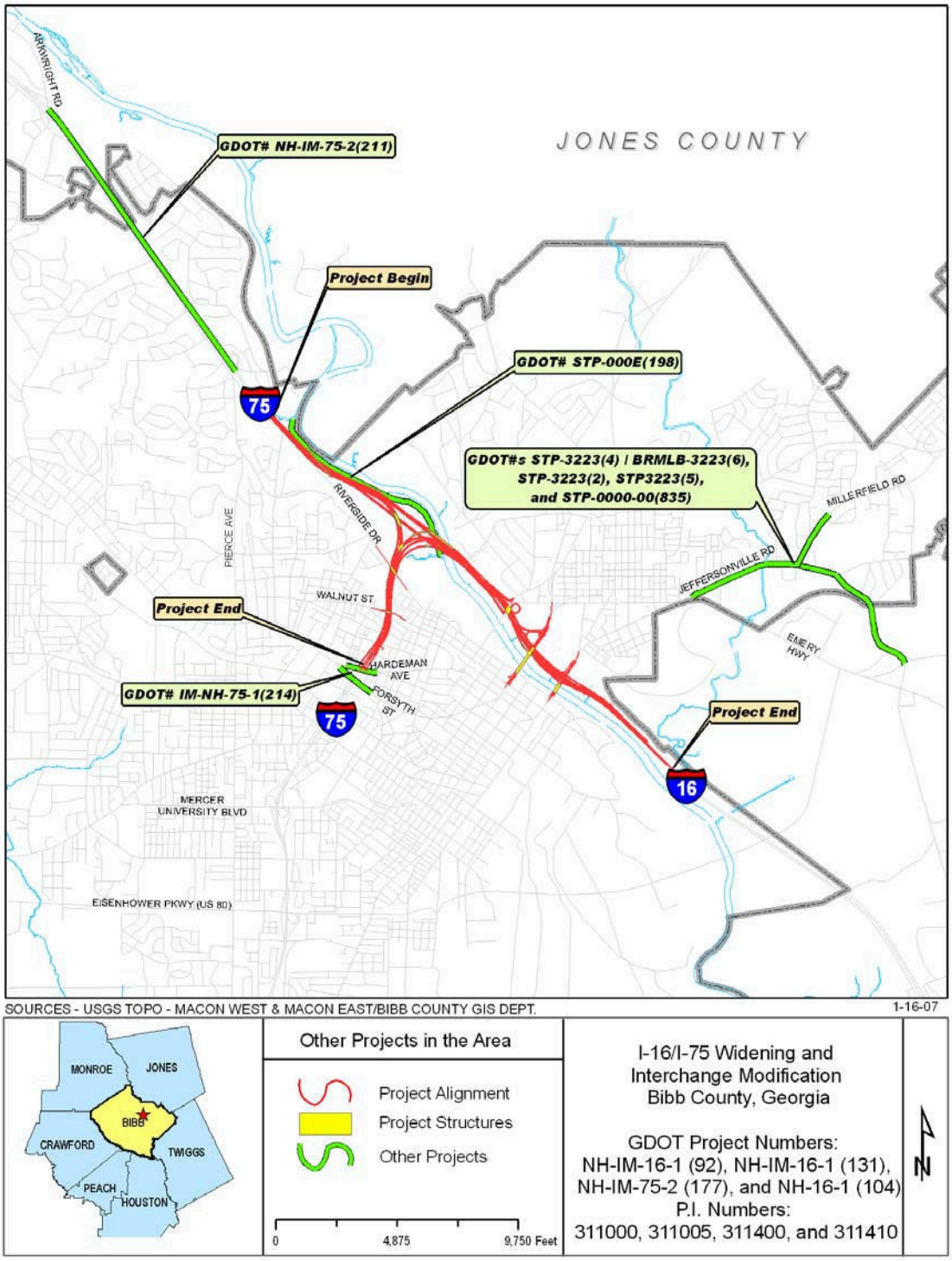
Figure 10: Other Road Improvement Projects in the Area



ATTACHMENT #2

SUMMARY OF PROJECT COSTS

SUMMARY OF PROJECT COSTS

October 1, 2009

Project Costs		311000 NHIM0-0016-01(092)	311005 NHIM0-0016-01(131)	311400 NHIM0-0075-02(177)	311410 NH000-0016-01(104)	Total of all 4 Projects
A.	Construction Costs (incl 10% E&C)	$59,683,770	$39,157,552	$41,429,170	$164,486,235	$304,756,726
B.	Right of Way	$3,594,000	$218,000	$0	$10,096,000	$13,908,000
C.	Reimbursable Utilities	$575,000	$550,000	$50,000	$150,000	$1,325,000
		$63,852,770	**$39,925,552**	**$41,479,170**	**$174,732,235**	**$319,989,726**

Note: An itemized utility estimate has not yet been received. The utility estimate(s) above is based on $50,000 per mile of roadway construction plus an additional $500,000 for each impacted transmission tower in PI Nos. 311000 & 311005.

Note: The above right-of-way estimate(s) assumes a total land donation of 1,320,601 SF on 37 parcels owned by the city, county, and/or state.

Estimate Report for file "311000_2009-10-01"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	2351752.00	TRAFFIC CONTROL -	2351752.00
153-1300	1	EA	73914.48	FIELD ENGINEERS OFFICE TP 3	73914.48
201-1500	1	LS	3000000.00	CLEARING & GRUBBING -	3000000.00
208-0100	375000	CY	3.50	IN PLACE EMBANKMENT	1312500.00
310-5120	88246	SY	22.88	GR AGGR BASE CRS, 12 INCH, INCL MATL	2019068.48
402-3113	1107	TN	74.31	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	82261.17
402-3121	4427	TN	59.47	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	263273.69
402-3190	20364	TN	67.77	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	1380068.28
413-1000	13459	GL	2.00	BITUM TACK COAT	26918.00
430-0620	114476	SY	75.33	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	8623477.08
441-0106	1677	SY	23.82	CONC SIDEWALK, 6 IN	39946.14
441-0756	625	SY	40.00	CONCRETE MEDIAN, 8 IN	25000.00
441-6222	7106	LF	14.96	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	106305.76
500-3101	212	CY	238.02	CLASS A CONCRETE	50460.24
511-1000	27495	LB	0.89	BAR REINF STEEL	24470.55
550-1300	10000	LF	53.29	STORM DRAIN PIPE, 30 IN, H 1-10	532900.00
621-4085	1000	LF	467.00	CONCRETE SIDE BARRIER, TYPE 7W	467000.00
627-1160	4200	LF	201.70	TRAFFIC BARRIER H, WALL NO -	847140.00
641-1200	15400	LF	17.89	GUARDRAIL, TP W	275506.00
648-1500	1	EA	40000.00	IMPACT ATTENUATOR UNIT/ARRAY, TYPE S-	40000.00
668-1100	180	EA	2429.74	CATCH BASIN, GP 1	437353.20
999-9999	1	Lump Sum	90000.00	WETLAND MITIGATION	90000.00
				Section Sub Total:	**$22,069,315.07**

Section Walls

Item Number	Quantity	Units	Unit Price	Item Description	Cost
621-6002	647	LF	100.00	WALL NO.38, CMB TP S-2, I-16 EB STA. 628+02 TO 634+50 RT.	64700.00
621-6003	2308	LF	200.00	WALL NO.30A, CMB TP S-3, I-16 WB STA. 599+81 TO 622+75 LT.	461600.00
621-6202	2074	LF	550.00	WALL NO.31, CSB TP 2-SB, RAMP ISE STA. 93+62 RT. TO I-16 EB STA. 618+70 RT.	1140700.00
621-6210	86	LF	200.00	WALL NO.35, CSB TP 6-S, RAMP I STA. 147+80 TO 148+65 RT.	17200.00
621-6210	1266	LF	200.00	WALL NO.36, CSB TP 6-S, I-16 WB STA. 627+31 TO 640+00 LT.	253200.00
621-XXXX	960	LF	550.00	WALL NO.32, CSB, RAMP K STA. 131+71 TO 141+31 LT.	528000.00
627-XXXX	1802	SF	50.00	WALL NO.32A, MSE WALL FACE, RAMP F STA. 130+34 TO 132+00 RT.	90100.00
627-XXXX	8749	SF	50.00	WALL NO.34, MSE WALL FACE, RAMP J STA. 91+37 TO 24+49 RT.	437450.00
627-XXXX	15568	SF	50.00	WALL NO.37, MSE WALL FACE, RAMP F STA. 140+60 TO 148+73 RT.	778400.00
627-XXXX	18783	SF	50.00	WALL NO.38, MSE WALL FACE, I-16 EB STA. 634+50 RT. TO RAMP C STA. 77+52 RT.	939150.00
627-XXXX	6292	SF	50.00	WALL NO.39, MSE WALL FACE, RAMP CDW STA. 182+00 TO 187+71 LT.	314600.00
627-XXXX	5649	SF	50.00	WALL NO.47, MSE WALL FACE, SECOND ST. STA. 32+50 RT. TO 34+75 LT.	282450.00
627-XXXX	520	SF	50.00	WALL NO. , MSE WALL FACE, I-16 EB STA. 636+50 LT.	26000.00
				Section Sub Total:	**$5,333,550.00**

Section Bridge 4, Ramp E Over Ramp C

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	143	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	5878.73

441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	2265	SY	4.19	GROOVED CONCRETE	9490.35
500-1006	541	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	384899.86
500-2100	1579	LF	39.86	CONCRETE BARRIER	62938.94
500-3002	1108	CY	470.98	CLASS AA CONCRETE	521845.84
507-9002	979	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	109873.17
507-9003	400	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	56012.00
507-9033	3000	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	652710.00
511-1000	162887	LB	0.89	BAR REINF STEEL	144969.43
511-3000	147277	LS	0.96	SUPERSTR REINF STEEL, BR NO -	141385.92
520-1147	4020	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	311791.20
627-1020	2000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	109340.00
				Section Sub Total:	**$2,587,044.24**

Section Bridge 5, Ramp F Over Flood Plain

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	167	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	6865.37
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	4077	SY	4.19	GROOVED CONCRETE	17082.63
500-1006	873	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	621104.58
500-2100	1476	LF	39.86	CONCRETE BARRIER	58833.36
500-3002	1307	CY	470.98	CLASS AA CONCRETE	615570.86
507-9003	2804	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	392644.12
507-9030	3114	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	550928.88
511-1000	192091	LB	0.89	BAR REINF STEEL	170960.99
511-3000	237397	LS	0.96	SUPERSTR REINF STEEL, BR NO -	227901.12
520-1147	2220	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	172183.20
627-1020	2000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	109340.00
				Section Sub Total:	**$3,019,323.91**

Section Bridge 6,2nd St. Over Riverside,NSRR,and I-16

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	429	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	17636.19
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	16693	SY	4.19	GROOVED CONCRETE	69943.67
500-1006	3447	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	2452402.62
500-2100	2587	LF	39.86	CONCRETE BARRIER	103117.82
500-3002	3719	CY	470.98	CLASS AA CONCRETE	1751574.62
507-9003	4384	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	613891.52
507-9031	2003	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	357134.90
507-9033	14030	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	3052507.10
511-1000	546755	LB	0.89	BAR REINF STEEL	486611.95
511-3000	937649	LS	0.96	SUPERSTR REINF STEEL, BR NO -	900143.04
520-1147	11880	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	921412.80
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$11,276,567.39**

Section Bridge 7, CDW Over Spring Street

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	49	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2014.39
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1634	SY	4.19	GROOVED CONCRETE	6846.46
500-1006	285	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	202766.10
500-2100	446	LF	39.86	CONCRETE BARRIER	17777.56
500-3002	213	CY	470.98	CLASS AA CONCRETE	100318.74
507-9002	411	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	46126.53
507-9003	1716	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	240291.48
511-1000	31362	LB	0.89	BAR REINF STEEL	27912.18

511-3000	77475	LS	0.96	SUPERSTR REINF STEEL, BR NO -	74376.00
520-1147	1680	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	130300.80
522-1000	1	LS	44100.49	SHORING	44100.49
				Section Sub Total:	**$968,739.53**

Section Bridge 8, I-16 Over Spring Street

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	147	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	6043.17
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	4307	SY	4.19	GROOVED CONCRETE	18046.33
500-1006	707	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	503002.22
500-2100	448	LF	39.86	CONCRETE BARRIER	17857.28
500-3002	583	CY	470.98	CLASS AA CONCRETE	274581.34
507-9003	3956	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	553958.68
507-9003	1196	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	167475.88
511-1000	85671	LB	0.89	BAR REINF STEEL	76247.19
511-3000	192392	LS	0.96	SUPERSTR REINF STEEL, BR NO -	184696.32
520-1147	4380	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	339712.80
522-1000	1	LS	44100.49	SHORING	44100.49
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
				Section Sub Total:	**$2,433,998.96**

Section Bridge 9, Ramp CDE Over Spring Street

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	49	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2014.39
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1265	SY	4.19	GROOVED CONCRETE	5300.35
500-1006	226	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	160789.96
500-2100	449	LF	39.86	CONCRETE BARRIER	17897.14
500-3002	192	CY	470.98	CLASS AA CONCRETE	90428.16
507-9003	364	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	50970.92
507-9003	1208	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	169156.24
511-1000	28239	LB	0.89	BAR REINF STEEL	25132.71
511-3000	61488	LS	0.96	SUPERSTR REINF STEEL, BR NO -	59028.48
520-1147	1500	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	116340.00
522-1000	1	LS	44100.49	SHORING	44100.49
				Section Sub Total:	**$817,067.64**

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
162-1300	180	EA	189.43	EROSION CONTROL CHECK DAM, TP -	34097.40
163-0232	30	AC	283.37	TEMPORARY GRASSING	8501.10
163-0240	930	TN	129.90	MULCH	120807.00
163-0300	36	EA	1148.70	CONSTRUCTION EXIT	41353.20
163-0501	3	EA	839.99	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	2519.97
163-0502	15	EA	399.64	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 2	5994.60
163-0503	30	EA	442.20	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	13266.00
163-0504	150	EA	425.00	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 4	63750.00
163-0520	15000	LF	12.55	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	188250.00
163-0521	200	EA	218.40	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	43680.00
163-0530	16500	LF	2.42	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	39930.00
163-0531	2	EA	7381.63	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	14763.26
163-0550	350	EA	188.29	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	65901.50
165-0010	31250	LF	0.53	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	16562.50
165-0020	1000	LF	1.43	MAINTENANCE OF TEMPORARY SILT FENCE,	1430.00

				TP B	
165-0030	97500	LF	0.66	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	64350.00
165-0040	380	EA	56.18	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	21348.40
165-0050	3000	LF	2.45	MAINTENANCE OF SILT RETENTION BARRIER	7350.00
165-0060	2	EA	1698.39	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	3396.78
165-0070	8250	LF	2.83	MAINTENANCE OF BALED STRAW EROSION CHECK	23347.50
165-0085	3	EA	339.92	MAINTENANCE OF SILT CONTROL GATE, TP 1	1019.76
165-0086	15	EA	199.64	MAINTENANCE OF SILT CONTROL GATE, TP 2	2994.60
165-0087	30	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	3404.40
165-0088	150	EA	100.00	MAINTENANCE OF SILT CONTROL GATE, TP 4	15000.00
165-0101	36	EA	481.34	MAINTENANCE OF CONSTRUCTION EXIT	17328.24
165-0105	350	EA	78.69	MAINTENANCE OF INLET SEDIMENT TRAP	27541.50
167-1000	2	EA	460.30	WATER QUALITY MONITORING AND SAMPLING	920.60
167-1500	30	MO	685.80	WATER QUALITY INSPECTIONS	20574.00
170-2000	3000	LF	8.24	STAKED SILT RETENTION BARRIER	24720.00
171-0010	62500	LF	1.84	TEMPORARY SILT FENCE, TYPE A	115000.00
171-0020	2000	LF	0.00	TEMPORARY SILT FENCE, TYPE B	0.00
171-0030	195000	LF	2.95	TEMPORARY SILT FENCE, TYPE C	575250.00
603-2012	56000	SY	41.29	STN DUMPED RIP RAP, TP 1, 12 IN	2312240.00
603-7000	56000	SY	3.80	PLASTIC FILTER FABRIC	212800.00
700-6910	58	AC	674.07	PERMANENT GRASSING	39096.06
700-7000	120	TN	60.51	AGRICULTURAL LIME	7261.20
700-7010	100	GL	20.53	LIQUID LIME	2053.00
700-8000	6	TN	409.57	FERTILIZER MIXED GRADE	2457.42
700-8100	2000	LB	2.30	FERTILIZER NITROGEN CONTENT	4600.00
710-9000	45000	SY	1.99	PERMANENT SOIL REINFORCING MAT	89550.00
715-2200	30000	SY	1.47	BITUMINOUS TREATED ROVING, WATERWAYS	44100.00
716-2000	120000	SY	0.95	EROSION CONTROL MATS, SLOPES	114000.00
				Section Sub Total:	**$4,412,509.99**

Section Signing, Striping, and Lighting

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3101	2	CY	238.02	CLASS A CONCRETE	476.04
610-6520	9	EA	865.78	REM HIGHWAY SIGN, SPCL ROADSIDE	7792.02
610-9310	4	LS	13235.29	REM STR SUPPORT, TP -	52941.16
615-1200	300	LF	9.98	DIRECTIONAL BORE -	2994.00
636-1032	130	SF	20.80	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	2704.00
636-1072	3735	SF	30.53	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3	114029.55
636-3000	455	LB	3.89	GALV STEEL STR SHAPE POST	1769.95
638-1001	7	LS	57694.98	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA -	403864.86
639-2001	600	LF	2.65	STEEL WIRE STRAND CABLE, 1/4 IN	1590.00
639-4004	9	EA	5819.39	STRAIN POLE, TP IV	52374.51
647-1000	5	LS	54642.03	TRAFFIC SIGNAL INSTALLATION NO -	273210.15
647-2150	5	EA	1712.96	PULL BOX, PB-5	8564.80
653-0120	40	EA	72.49	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	2899.60
653-0210	15	EA	103.08	THERMOPLASTIC PVMT MARKING, WORD, TP 1	1546.20
653-1501	15000	LF	0.44	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	6600.00
653-1502	165500	LF	0.45	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	74475.00
653-1704	600	LF	3.47	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	2082.00
653-1804	14500	LF	1.68	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	24360.00
653-3501	30900	GLF	0.33	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	10197.00
654-1003	400	EA	3.20	RAISED PVMT MARKERS TP 3	1280.00
655-5000	4	EA	420.00	PVMT ARROW, THERMOPLASTIC, WITH	1680.00

				RAISED REFLECTORS	
657-1085	15500	LF	5.36	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	83080.00
657-1104	4100	LF	6.67	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	27347.00
657-3085	13800	GLF	4.09	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	56442.00
657-6085	12900	LF	5.29	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	68241.00
682-6233	900	LF	3.20	CONDUIT, NONMETL, TP 3, 2 IN	2880.00
682-7042	170	LF	49.78	MULTI-CELL CONDUIT SYS, 4-WAY, RIGID METAL	8462.60
682-7043	130	LF	40.77	MULTI-CELL CONDUIT SYS, 4-WAY, FIBERGLASS	5300.10
935-1521	500	LF	2.27	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, MULTI MODE, 6 FIBER	1135.00
935-3103	5	EA	596.39	FIBER OPTIC CLOSURE, UNDERGROUND, 24 FIBER	2981.95
935-4010	20	EA	52.14	FIBER OPTIC SPLICE, FUSION	1042.80
935-5060	2	EA	161.97	FIBER OPTIC SNOWSHOE	323.94
935-6561	2	EA	2238.80	EXTERNAL TRANSCEIVER, DROP AND REPEAT, 1300 MULTI MODE, (SIGNAL JOBS)	4477.60
935-8000	3	LS	1940.15	TESTING	5820.45
938-1100	3	EA	5433.63	INTERSECTION VIDEO DETECTION SYSTEM ASSEMBLY, TYPE A	16300.89
938-1200	1	EA	487.18	PROGRAMMING MONITOR, TYPE A	487.18
938-8000	3	LS	1860.38	TESTING	5581.14
938-8500	1	LS	2521.18	TRAINING	2521.18
				Section Sub Total:	**$1,339,855.67**

Total Estimated Cost: $54,257,972.40

Subtotal Construction Cost	**$54,257,972.40**
E&C Rate 10.0 %	$5,425,797.24
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$59,683,769.64**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$59,683,769.64**

Estimate Report for file "311005_2009-10-01"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	1212362.00	TRAFFIC CONTROL -	1212362.00
153-1300	1	EA	73914.48	FIELD ENGINEERS OFFICE TP 3	73914.48
201-1500	1	LS	1500000.00	CLEARING & GRUBBING -	1500000.00
208-0100	100000	CY	3.50	IN PLACE EMBANKMENT	350000.00
310-5120	79260	SY	22.88	GR AGGR BASE CRS, 12 INCH, INCL MATL	1813468.80
402-3113	1095	TN	74.31	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	81369.45
402-3121	4381	TN	59.47	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	260538.07
402-3190	18223	TN	67.77	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	1234972.71
413-1000	12152	GL	2.00	BITUM TACK COAT	24304.00
430-0620	101594	SY	75.33	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	7653076.02
441-0104	4808	SY	30.72	CONC SIDEWALK, 4 IN	147701.76
441-6222	8167	LF	14.96	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	122178.32
550-1300	5000	LF	53.29	STORM DRAIN PIPE, 30 IN, H 1-10	266450.00
621-4085	1000	LF	467.00	CONCRETE SIDE BARRIER, TYPE 7W	467000.00
627-1160	5510	LF	201.70	TRAFFIC BARRIER H, WALL NO -	1111367.00
641-1200	13050	LF	17.89	GUARDRAIL, TP W	233464.50
648-1500	1	EA	40000.00	IMPACT ATTENUATOR UNIT/ARRAY, TYPE S-	40000.00
668-1100	100	EA	2429.74	CATCH BASIN, GP 1	242974.00
999-9999	1	Lump Sum	15000.00	WETLAND MITIGATION	15000.00
				Section Sub Total:	**$16,850,141.11**

Section Walls

Item Number	Quantity	Units	Unit Price	Item Description	Cost
621-6002	124	LF	100.00	WALL NO.45, CMB TP S-2, RAMP B STA. 207+48 TO 208+72 LT.	12400.00
621-6002	42	LF	100.00	WALL NO.45, CMB TP S-2, RAMP B STA. 209+59 TO 210+00 LT.	4200.00
621-6003	186	LF	200.00	WALL NO.43, CMB TP S-3, RAMP B STA. 204+34 TO 206+19 LT.	37200.00
621-6003	88	LF	200.00	WALL NO.45, CMB TP S-3, RAMP B STA. 208+72 TO 209+59 LT.	17600.00
621-6003	317	LF	200.00	WALL NO.49, CMB TP S-3, RAMP D STA. 175+84 TO 179+00 RT.	63400.00
627-XXXX	5866	SF	50.00	WALL NO.42, MSE WALL FACE, COLISEUM DR. STA. 65+50 RT. TO I-16 WB STA. 667+00 LT.	293300.00
627-XXXX	1153	SF	50.00	WALL NO.44, TIEBACK WALL FACE, RAMP B STA. 206+31 TO 207+43 RT.	57650.00
627-XXXX	4857	SF	50.00	WALL NO.42, MSE WALL FACE, I-16 EB STA. 666+00 RT. TO COLISEUM DR. STA. 65+50 RT.	242850.00
627-XXXX	3852	SF	50.00	WALL NO.40, MSE WALL FACE, RAMP D STA. 179+00 TO 182+50 RT.	192600.00
627-XXXX	48120	SF	50.00	WALL NO.41, MSE WALL FACE, RAMP E STA. 174+50 LT. TO STA. 175+00 RT.	2406000.00
627-XXXX	15175	SF	50.00	WALL NO.50, MSE WALL FACE, RAMP C STA. 88+19 RT. TO MLK JR. BLVD STA. 63+01 RT.	758750.00
627-XXXX	11252	SF	50.00	WALL NO.46, MSE WALL FACE, RAMP B STA. 207+43 TO 216+29 RT.	562600.00
627-XXXX	20242	SF	50.00	WALL NO.38, MSE WALL FACE, RAMP C STA. 77+52 TO 89+38 RT.	1012100.00
627-XXXX	25440	SF	50.00	WALL NO.39, MSE WALL FACE, RAMP CDW STA. 187+71 LT. TO 186+21 RT.	1272000.00
627-XXXX	358	SF	50.00	WALL NO.48, MSE WALL FACE, MLK JR. BLVD STA. 58+20 TO 58+71 LT.	17900.00
				Section Sub Total:	**$6,950,550.00**

Section Bridge 1, CDW Over Coliseum Drive

Item Number	Quantity	Units	Unit Price	Item Description	Cost

211-0200	147	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	6043.17
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	2580	SY	4.19	GROOVED CONCRETE	10810.20
500-1006	579	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	411935.34
500-2100	1331	LF	39.86	CONCRETE BARRIER	53053.66
500-3002	811	CY	470.98	CLASS AA CONCRETE	381964.78
507-9002	888	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	99660.24
507-9030	3106	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	549513.52
511-1000	119244	LB	0.89	BAR REINF STEEL	106127.16
511-3000	157459	LS	0.96	SUPERSTR REINF STEEL, BR NO -	151160.64
520-1147	7680	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	595660.80
522-1000	1	LS	44100.49	SHORING	44100.49
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$2,704,618.80**

Section Bridge 2, I-16 Over Coliseum Drive

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	61	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2507.71
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	3197	SY	4.19	GROOVED CONCRETE	13395.43
500-1006	471	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	335097.66
500-2100	584	LF	39.86	CONCRETE BARRIER	23278.24
500-3002	299	CY	470.98	CLASS AA CONCRETE	140823.02
507-9002	2044	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	229398.12
511-1000	44016	LB	0.89	BAR REINF STEEL	39174.24
511-3000	128204	LS	0.96	SUPERSTR REINF STEEL, BR NO -	123075.84
520-1147	2160	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	167529.60
522-1000	1	LS	44100.49	SHORING	44100.49
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$1,585,337.61**

Section Bridge 3, Coliseum Drive Over The Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	177	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	5246.28
500-0100	6107	SY	4.19	GROOVED CONCRETE	25588.33
500-1006	1358	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	966162.68
500-2100	844	LF	39.86	CONCRETE BARRIER	33641.84
500-3002	1362	CY	470.98	CLASS AA CONCRETE	641474.76
507-9002	2880	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	323222.40
507-9032	5563	LF	201.35	PSC BEAMS, AASHTO, BULB TEE, 72 IN, BR NO -	1120110.05
511-1000	200206	LB	0.89	BAR REINF STEEL	178183.34
511-3000	369478	LS	0.96	SUPERSTR REINF STEEL, BR NO -	354698.88
516-1100	844	LF	51.84	ALUM HANDRAIL, STD 3626	43752.96
520-1147	5640	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	437438.40
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	2	EA	13044.47	COFFERDAM	26088.94
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
603-2024	3127	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	143560.57
603-7000	3127	SY	3.80	PLASTIC FILTER FABRIC	11882.60
				Section Sub Total:	**$4,527,520.98**

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
162-1300	4	EA	189.43	EROSION CONTROL CHECK DAM, TP -	757.72
163-0232	20	AC	283.37	TEMPORARY GRASSING	5667.40
163-0240	660	TN	129.90	MULCH	85734.00
163-0300	12	EA	1148.70	CONSTRUCTION EXIT	13784.40
163-0501	2	EA	839.99	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	1679.98
163-0502	5	EA	399.64	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 2	1998.20
				CONSTRUCT AND REMOVE SILT CONTROL	

163-0503	15	EA	442.20	GATE, TP 3	6633.00
163-0504	100	EA	425.00	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 4	42500.00
163-0520	7500	LF	12.55	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	94125.00
163-0521	45	EA	218.40	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	9828.00
163-0530	8000	LF	2.42	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	19360.00
163-0531	2	EA	7381.63	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	14763.26
163-0550	200	EA	188.29	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	37658.00
165-0010	12000	LF	0.53	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	6360.00
165-0020	500	LF	1.43	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	715.00
165-0030	40000	LF	0.66	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	26400.00
165-0040	49	EA	56.18	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	2752.82
165-0050	1000	LF	2.45	MAINTENANCE OF SILT RETENTION BARRIER	2450.00
165-0060	2	EA	1698.39	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	3396.78
165-0070	4000	LF	2.83	MAINTENANCE OF BALED STRAW EROSION CHECK	11320.00
165-0085	2	EA	339.92	MAINTENANCE OF SILT CONTROL GATE, TP 1	679.84
165-0086	5	EA	199.64	MAINTENANCE OF SILT CONTROL GATE, TP 2	998.20
165-0087	15	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	1702.20
165-0088	100	EA	100.00	MAINTENANCE OF SILT CONTROL GATE, TP 4	10000.00
165-0101	12	EA	481.34	MAINTENANCE OF CONSTRUCTION EXIT	5776.08
165-0105	200	EA	78.69	MAINTENANCE OF INLET SEDIMENT TRAP	15738.00
167-1000	2	EA	460.30	WATER QUALITY MONITORING AND SAMPLING	920.60
167-1500	24	MO	685.80	WATER QUALITY INSPECTIONS	16459.20
170-2000	1000	LF	8.24	STAKED SILT RETENTION BARRIER	8240.00
171-0010	24000	LF	1.84	TEMPORARY SILT FENCE, TYPE A	44160.00
171-0020	1000	LF	2.84	TEMPORARY SILT FENCE, TYPE B	2840.00
171-0030	80000	LF	2.95	TEMPORARY SILT FENCE, TYPE C	236000.00
603-2012	27000	SY	41.29	STN DUMPED RIP RAP, TP 1, 12 IN	1114830.00
603-7000	27000	SY	3.80	PLASTIC FILTER FABRIC	102600.00
700-6910	41	AC	674.07	PERMANENT GRASSING	27636.87
700-7000	110	TN	60.51	AGRICULTURAL LIME	6656.10
700-7010	90	GL	20.53	LIQUID LIME	1847.70
700-8000	4	TN	409.57	FERTILIZER MIXED GRADE	1638.28
700-8100	1800	LB	2.30	FERTILIZER NITROGEN CONTENT	4140.00
710-9000	17000	SY	1.99	PERMANENT SOIL REINFORCING MAT	33830.00
715-2200	12000	SY	1.47	BITUMINOUS TREATED ROVING, WATERWAYS	17640.00
716-2000	123000	SY	0.95	EROSION CONTROL MATS, SLOPES	116850.00
				Section Sub Total:	**$2,159,066.63**

Section Signing, Striping, and Lighting

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3101	4	CY	238.02	CLASS A CONCRETE	952.08
610-6515	10	EA	31.60	REM HIGHWAY SIGN, STD	316.00
610-6520	3	EA	865.78	REM HIGHWAY SIGN, SPCL ROADSIDE	2597.34
610-9310	4	LS	13235.29	REM STR SUPPORT, TP I	52941.16
636-1032	130	SF	20.80	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	2704.00
636-1072	1620	SF	30.53	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3	49458.60
636-3000	1670	LB	3.89	GALV STEEL STR SHAPE POST	6496.30
636-9094	25	LF	77.75	PILING IN PLACE, SIGNS, STEEL H, HP 12 X 53	1943.75
638-1001	3	LS	57694.98	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA -	173084.94
638-1003	1	LS	44524.20	STR SUPPORT FOR OVERHEAD SIGN, TP III, STA -	44524.20
639-2002	400	LF	3.68	STEEL WIRE STRAND CABLE, 3/8 IN	1472.00

639-4003	4	EA	6440.21	STRAIN POLE, TP III	25760.84
639-4004	12	EA	5819.39	STRAIN POLE, TP IV	69832.68
647-1000	3	LS	54642.03	TRAFFIC SIGNAL INSTALLATION NO -	163926.09
647-2150	3	EA	1712.96	PULL BOX, PB-5	5138.88
653-0120	30	EA	72.49	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	2174.70
653-1501	13100	LF	0.44	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	5764.00
653-1502	13500	LF	0.45	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	6075.00
653-1704	230	LF	3.47	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	798.10
653-1804	3000	LF	1.68	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	5040.00
653-3501	16600	GLF	0.33	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	5478.00
653-6004	240	SY	2.71	THERMOPLASTIC TRAF STRIPING, WHITE	650.40
654-1003	180	EA	3.20	RAISED PVMT MARKERS TP 3	576.00
655-7000	3	EA	744.41	PAVEMENT ARROW, PREFORMED PLASTIC WITH RAISED REFLECTORS	2233.23
657-1085	12525	LF	5.36	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	67134.00
657-1104	2900	LF	6.67	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	19343.00
657-3085	2650	GLF	4.09	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	10838.50
657-5001	200	SY	20.00	PREFORMED PLASTIC PAVEMENT MARKING, WHITE, TP PB	4000.00
657-5003	4	EA	491.56	PREFORMED PLASTIC PAVEMENT MARKING, WORD TP 1, TP PB	1966.24
657-5017	6	EA	529.87	PREFORMED PLASTIC PVMT MKG, WORDS AND/OR SYM, ARROW TP 2, WHITE, TP PB	3179.22
657-6085	9450	LF	5.29	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	49990.50
682-6233	600	LF	3.20	CONDUIT, NONMETL, TP 3, 2 IN	1920.00
682-7042	170	LF	49.78	MULTI-CELL CONDUIT SYS, 4-WAY, RIGID METAL	8462.60
682-7043	130	LF	40.77	MULTI-CELL CONDUIT SYS, 4-WAY, FIBERGLASS	5300.10
935-1521	300	LF	2.27	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, MULTI MODE, 6 FIBER	681.00
935-3103	3	EA	596.39	FIBER OPTIC CLOSURE, UNDERGROUND, 24 FIBER	1789.17
935-4010	18	EA	52.14	FIBER OPTIC SPLICE, FUSION	938.52
935-6561	3	EA	2238.80	EXTERNAL TRANSCEIVER, DROP AND REPEAT, 1300 MULTI MODE, (SIGNAL JOBS)	6716.40
935-8000	3	LS	1940.15	TESTING	5820.45
938-8500	1	LS	2521.18	TRAINING	2521.18
				Section Sub Total:	**$820,539.17**

Total Estimated Cost: $35,597,774.30

Subtotal Construction Cost	**$35,597,774.30**
E&C Rate 10.0 %	$3,559,777.43
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$39,157,551.73**
Right Of Way	$0.00
ReImb. Utilities	$0.00

Grand Total Project Cost $39,157,551.73

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Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	1195984.00	TRAFFIC CONTROL -	1195984.00
153-1300	1	EA	73914.48	FIELD ENGINEERS OFFICE TP 3	73914.48
201-1500	1	LS	2250000.00	CLEARING & GRUBBING -	2250000.00
208-0100	201680	CY	3.50	IN PLACE EMBANKMENT	705880.00
310-5120	56332	SY	22.88	GR AGGR BASE CRS, 12 INCH, INCL MATL	1288876.16
402-3190	13471	TN	67.77	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	912929.67
413-1000	8164	GL	2.00	BITUM TACK COAT	16328.00
430-0620	81640	SY	75.33	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	6149941.20
500-3101	671	CY	238.02	CLASS A CONCRETE	159711.42
500-3200	124	CY	411.00	CLASS B CONCRETE - HEADWALLS	50964.00
511-1000	76759	LB	0.89	BAR REINF STEEL	68315.51
550-1180	3777	LF	36.27	STORM DRAIN PIPE, 18 IN, H 1-10	136991.79
550-1360	36	LF	62.22	STORM DRAIN PIPE, 36 IN, H 1-10	2239.92
550-1480	116	LF	105.51	STORM DRAIN PIPE, 48 IN, H 1-10	12239.16
620-0100	9300	LF	26.46	TEMPORARY BARRIER, METHOD NO. 1	246078.00
620-0300	6800	LF	72.29	TEMPORARY BARRIER, METHOD NO. 3	491572.00
621-4086	2143	LF	62.82	CONCRETE SIDE BARRIER, TYPE 7WS	134623.26
641-1200	4737	LF	17.89	GUARDRAIL, TP W	84744.93
668-1100	46	EA	2429.74	CATCH BASIN, GP 1	111768.04
999-9999	1	Lump Sum	160000.00	WETLAND MITIGATION	160000.00
				Section Sub Total:	**$14,253,101.54**

Section Walls

Item Number	Quantity	Units	Unit Price	Item Description	Cost
621-6002	618	LF	100.00	WALL NO.24, CMB TP S-2, I-75 SB STA. 1093+73 TO 1099+84 LT.	61800.00
621-6003	979	LF	200.00	WALL NO.22, CMB TP S-3, I-75 STA. 1088+72 TO 1098+50	195800.00
621-6003	1111	LF	200.00	WALL NO.22, CMB TP S-3, I-75 STA. 1110+52 TO 1121+62	222200.00
627-XXXX	56043	SF	50.00	WALL NO.21, MSE WALL FACE, RAMP CDWN STA. 102+73 TO 122+20 RT.	2802150.00
627-XXXX	13827	SF	50.00	WALL NO.25, MSE WALL FACE, RAMP CDWN STA. 135+20 RT. TO I-75 NB STA. 1132+40 RT.	691350.00
627-XXXX	19293	SF	50.00	WALL NO.22, MSE WALL FACE, I-75 STA. 1098+50 TO 1110+52	964650.00
627-XXXX	17478	SF	50.00	WALL NO.23, MSE WALL FACE, RAMP ISE STA. 34+00 RT. TO I-75 SB STA. 1125+30 LT.	873900.00
627-XXXX	44346	SF	50.00	WALL NO.33, MSE WALL FACE, RAMP CDWN STA. 127+20 RT. TO I-75 NB STA. 1099+34 RT.	2217300.00
627-XXXX	21943	SF	50.00	WALL NO.33, MSE WALL FACE, I-75 NB STA. 1099+34 RT. TO RAILROAD STA. 5022+09 RT.	1097150.00
627-XXXX	7693	SF	50.00	WALL NO.4, MSE WALL FACE, RAILROAD STA. 5014+23 LT. TO I-75 NB STA. 1099+24 RT.	384650.00
627-XXXX	21906	SF	50.00	WALL NO.4, MSE WALL FACE, I-75 NB STA. 1099+24 RT. TO RAILROAD STA. 5022+09 LT.	1095300.00
				Section Sub Total:	**$10,606,250.00**

Section Bridge 31, Tunnel at I-75 Over NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3107	13966	CY	397.45	CLASS A CONCRETE, RETAINING WALL	5550786.70
507-9002	26180	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	2938181.40
511-1000	1377739	LB	0.89	BAR REINF STEEL	1226187.71
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46

Section Sub Total:	**$9,887,524.27**

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
162-1300	4	EA	189.43	EROSION CONTROL CHECK DAM, TP -	757.72
163-0232	15	AC	283.37	TEMPORARY GRASSING	4250.55
163-0240	735	TN	129.90	MULCH	95476.50
163-0300	25	EA	1148.70	CONSTRUCTION EXIT	28717.50
163-0501	5	EA	839.99	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	4199.95
163-0502	10	EA	399.64	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 2	3996.40
163-0503	15	EA	442.20	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	6633.00
163-0504	200	EA	425.00	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 4	85000.00
163-0520	4500	LF	12.55	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	56475.00
163-0521	100	EA	218.40	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	21840.00
163-0530	1750	LF	2.42	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	4235.00
163-0531	2	EA	7381.63	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	14763.26
163-0550	300	EA	188.29	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	56487.00
165-0010	12000	LF	0.53	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	6360.00
165-0020	250	LF	1.43	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	357.50
165-0030	65000	LF	0.66	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	42900.00
165-0040	104	EA	56.18	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	5842.72
165-0050	1000	LF	2.45	MAINTENANCE OF SILT RETENTION BARRIER	2450.00
165-0060	2	EA	1698.39	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	3396.78
165-0070	875	LF	2.83	MAINTENANCE OF BALED STRAW EROSION CHECK	2476.25
165-0085	5	EA	339.92	MAINTENANCE OF SILT CONTROL GATE, TP 1	1699.60
165-0086	10	EA	199.64	MAINTENANCE OF SILT CONTROL GATE, TP 2	1996.40
165-0087	15	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	1702.20
165-0088	200	EA	100.00	MAINTENANCE OF SILT CONTROL GATE, TP 4	20000.00
165-0101	25	EA	481.34	MAINTENANCE OF CONSTRUCTION EXIT	12033.50
165-0105	300	EA	78.69	MAINTENANCE OF INLET SEDIMENT TRAP	23607.00
167-1000	2	EA	460.30	WATER QUALITY MONITORING AND SAMPLING	920.60
167-1500	24	MO	685.80	WATER QUALITY INSPECTIONS	16459.20
170-2000	1000	LF	8.24	STAKED SILT RETENTION BARRIER	8240.00
171-0010	24000	LF	1.84	TEMPORARY SILT FENCE, TYPE A	44160.00
171-0020	500	LF	2.84	TEMPORARY SILT FENCE, TYPE B	1420.00
171-0030	130000	LF	2.95	TEMPORARY SILT FENCE, TYPE C	383500.00
603-2012	28000	SY	41.29	STN DUMPED RIP RAP, TP 1, 12 IN	1156120.00
603-7000	28000	SY	3.80	PLASTIC FILTER FABRIC	106400.00
700-6910	42	AC	674.07	PERMANENT GRASSING	28310.94
700-7000	90	TN	60.51	AGRICULTURAL LIME	5445.90
700-7010	75	GL	20.53	LIQUID LIME	1539.75
700-8000	3	TN	409.57	FERTILIZER MIXED GRADE	1228.71
700-8100	1500	LB	2.30	FERTILIZER NITROGEN CONTENT	3450.00
710-9000	19000	SY	1.99	PERMANENT SOIL REINFORCING MAT	37810.00
715-2200	10000	SY	1.47	BITUMINOUS TREATED ROVING, WATERWAYS	14700.00
716-2000	120000	SY	0.95	EROSION CONTROL MATS, SLOPES	114000.00
				Section Sub Total:	**$2,431,358.93**

Section Signing, Striping, and Lighting

Item Number	Quantity	Units	Unit Price	Item Description	Cost
610-6515	2	EA	31.60	REM HIGHWAY SIGN, STD	63.20

610-6520	3	EA	865.78	REM HIGHWAY SIGN, SPCL ROADSIDE	2597.34
610-9310	2	LS	13235.29	REM STR SUPPORT, TP -	26470.58
636-1072	2350	SF	30.53	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3	71745.50
636-5010	30	EA	46.28	DELINEATOR, TP 1	1388.40
636-5011	4	EA	32.24	DELINEATOR, TP 1A	128.96
636-5020	20	EA	50.96	DELINEATOR, TP 2	1019.20
638-1001	4	LS	57694.98	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA -	230779.92
639-4003	4	EA	6440.21	STRAIN POLE, TP III	25760.84
653-1501	9350	LF	0.44	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	4114.00
653-1502	10100	LF	0.45	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	4545.00
653-1810	30800	LF	1.46	THERMOPLASTIC SOLID TRAF STRIPE, 10 IN, WHITE	44968.00
653-3501	19350	GLF	0.33	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	6385.50
654-1003	300	EA	3.20	RAISED PVMT MARKERS TP 3	960.00
657-1085	3150	LF	5.36	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	16884.00
657-1104	2250	LF	6.67	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	15007.50
657-3085	2350	GLF	4.09	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	9611.50
657-6085	4200	LF	5.29	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	22218.00
				Section Sub Total:	**$484,647.44**

Total Estimated Cost: $37,662,882.18

Subtotal Construction Cost	**$37,662,882.18**
E&C Rate 10.0 %	$3,766,288.22
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$41,429,170.40**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$41,429,170.40**

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Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	4723128.00	TRAFFIC CONTROL -	4723128.00
153-1300	1	EA	73914.48	FIELD ENGINEERS OFFICE TP 3	73914.48
201-1500	1	LS	3750000.00	CLEARING & GRUBBING -	3750000.00
208-0100	525000	CY	3.50	IN PLACE EMBANKMENT	1837500.00
310-5120	202870	SY	22.88	GR AGGR BASE CRS, 12 INCH, INCL MATL	4641665.60
402-3113	1953	TN	74.31	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	145127.43
402-3121	7816	TN	59.47	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	464817.52
402-3190	47211	TN	67.77	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	3199489.47
413-1000	30584	GL	2.00	BITUM TACK COAT	61168.00
430-0620	270330	SY	75.33	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	20363958.90
441-0106	2400	SY	23.82	CONC SIDEWALK, 6 IN	57168.00
441-6222	5370	LF	14.96	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	80335.20
500-3101	5334	CY	238.02	CLASS A CONCRETE	1269598.68
511-1000	655270	LB	0.89	BAR REINF STEEL	583190.30
550-1300	3000	LF	53.29	STORM DRAIN PIPE, 30 IN, H 1-10	159870.00
621-4085	1000	LF	467.00	CONCRETE SIDE BARRIER, TYPE 7W	467000.00
624-0410	33000	SF	19.45	SOUND BARRIER	641850.00
627-1160	7050	LF	201.70	TRAFFIC BARRIER H, WALL NO -	1421985.00
641-1200	25750	LF	17.89	GUARDRAIL, TP W	460667.50
648-1500	6	EA	40000.00	IMPACT ATTENUATOR UNIT/ARRAY, TYPE S-	240000.00
668-1100	60	EA	2429.74	CATCH BASIN, GP 1	145784.40
999-9999	1	Lump Sum	100000.00	WETLAND MITIGATION	100000.00
XXX-XXXX	14700	LF	230.00	HERITAGE TOUR STREETSCAPE IMPROVEMENTS	3381000.00
				Section Sub Total:	**$48,269,218.48**

Section Walls

Item Number	Quantity	Units	Unit Price	Item Description	Cost
621-6002	2198	LF	100.00	WALL NO.26, CMB TP S-2, RAMP CDWN STA. 72+73 LT. TO I-75 NB STA. 1078+50 RT.	219800.00
621-6002	1118	LF	100.00	WALL NO.16, CMB TP S-2, I-75 STA. 1045+75 TO 1056+93	111800.00
621-6003	193	LF	200.00	WALL NO.17B, CMB TP S-3, RAMP IWS STA. 60+55 TO 62+50 LT.	38600.00
621-6003	217	LF	200.00	WALL NO.14, CMB TP S-3, RAMP IWS STA. 53+25 TO 55+35 LT.	43400.00
621-6003	76	LF	200.00	WALL NO.26, CMB TP S-3, RAMP CDWN STA. 71+98 TO 72+73 LT.	15200.00
621-6003	1407	LF	200.00	WALL NO.19, CMB TP S-3, I-75 STA. 1062+48 TO 1076+55	281400.00
621-6210	816	LF	200.00	WALL NO.18, CSB TP 6-S, RAMP ISE STA. 56+56 TO 64+72 LT.	163200.00
621-6210	824	LF	200.00	WALL NO.2, CSB TP 6-S, I-75 NB STA. 996+78 RT. TO RAMP M STA. 128+00 LT.	164800.00
621-6210	512	LF	200.00	WALL NO.13B, CSB TP 6-S, I-75 SB STA. 1048+75 TO 1054+00 LT.	102400.00
621-6210	918	LF	200.00	WALL NO.20, CSB TP 6-S, I-75 SB STA. 1063+63 TO 1073+05	183600.00
621-6210	651	LF	200.00	WALL NO.1, CSB TP 6-S, I-75 SB STA. 997+00 TO 1003+50 LT.	130200.00
627-XXXX	7165	SF	50.00	WALL NO.6, MSE WALL FACE, RAMP M STA. 126+30 TO 129+78 RT.	358250.00
627-XXXX	45168	SF	50.00	WALL NO.26, MSE WALL FACE, RAMP CDWN STA. 72+75 RT. TO 71+98 LT.	2258400.00
627-XXXX	12497	SF	50.00	WALL NO.13, MSE WALL FACE, RAMP IWS STA. 51+74 RT. TO 55+35 LT.	624850.00
627-XXXX	7721	SF	50.00	WALL NO.17, MSE WALL FACE, RAMP IWS STA. 59+62 RT. TO 60+55 LT.	386050.00
627-XXXX	10885	SF	50.00	WALL NO.28, MSE WALL FACE, RAMP ISE	544250.00

				STA. 76+00 TO 81+65 LT.	
627-XXXX	28811	SF	50.00	WALL NO.3, MSE WALL FACE, RAMP L STA. 113+95 LT. TO RAMP CDS STA. 76+40 LT.	1440550.00
627-XXXX	1067	SF	50.00	WALL NO.5, MSE WALL FACE, I-75 PED. TRAIL CONN. STA. 4+71 RT. TO 4+11 LT.	53350.00
627-XXXX	11677	SF	50.00	WALL NO.9, MSE WALL FACE, RAMP INE STA. 48+20 TO 56+10 RT.	583850.00
627-XXXX	8516	SF	50.00	WALL NO.17A, MSE WALL FACE, RAMP CDWS STA. 108+78 RT. TO 109+39 LT.	425800.00
627-XXXX	34414	SF	50.00	WALL NO.12, MSE WALL FACE, RAMP INE STA. 58+30 RT. TO RAMP CDNE STA. 86+50 RT.	1720700.00
627-XXXX	15455	SF	50.00	WALL NO.11, MSE WALL FACE, RAMP CDS STA. 85+65 LT. TO 93+50 LT.	772750.00
627-XXXX	8018	SF	50.00	WALL NO.13A, MSE WALL FACE, RAMP CDS 103+37 RT. TO 105+40 LT.	400900.00
627-XXXX	43156	SF	50.00	WALL NO.21, MSE WALL FACE, RAMP CDWN STA. 84+85 TO 102+73 RT.	2157800.00
627-XXXX	7194	SF	50.00	WALL NO.29, MSE WALL FACE, RAMP CDSE STA. 107+40 TO 113+87 LT.	359700.00
627-XXXX	4942	SF	50.00	WALL NO. , MSE WALL FACE, DETOUR RAMP CDSE STA. 26+50 TO 30+00 RT.	247100.00
627-XXXX	2736	SF	50.00	WALL NO.10, MSE WALL FACE, RAMP CDS STA. 79+30 TO 80+94 LT.	136800.00
627-XXXX	2976	SF	50.00	WALL NO. , MSE WALL FACE, DETOUR RAMP CDNE STA. 54+25 TO 57+50 RT.	148800.00
627-XXXX	15173	SF	50.00	WALL NO.30, MSE WALL FACE, RAMP CDW STA. 132+55 TO 144+00 LT.	758650.00
627-XXXX	790	SF	50.00	WALL NO. , MSE WALL FACE, DETOUR RAMP CDSE STA. 30+00 TO 31+50 RT.	39500.00
627-XXXX	7820	SF	50.00	WALL NO.15, MSE WALL FACE, RAMP N STA. 109+50 TO 113+50 LT.	391000.00
627-XXXX	17265	SF	50.00	WALL NO.7, MSE WALL FACE, RAMP M STA. 126+24 LT. TO RAMP M-2 STA. 230+66 LT.	863250.00
627-XXXX	22838	SF	50.00	WALL NO.8, MSE WALL FACE, RAMP M STA. 139+39 LT. TO 144+73 RT.	1141900.00
627-XXXX	2990	SF	50.00	WALL NO.27, MSE WALL FACE, RAMP IWN STA. 27+25 TO 29+01 LT.	149500.00
				Section Sub Total:	**$17,418,100.00**

Section Bridge 10,Detour Bridge Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	334	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	9899.76
500-0100	4335	SY	4.19	GROOVED CONCRETE	18163.65
500-1006	1030	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	732803.80
500-2100	1934	LF	39.86	CONCRETE BARRIER	77089.24
500-3002	2255	CY	470.98	CLASS AA CONCRETE	1062059.90
507-9002	455	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	51064.65
507-9031	6312	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	1125429.60
511-1000	360799	LB	0.89	BAR REINF STEEL	321111.11
511-3000	231857	LS	0.96	SUPERSTR REINF STEEL, BR NO -	222582.72
520-1147	7260	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	563085.60
525-1000	3	EA	13044.47	COFFERDAM	39133.41
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
				Section Sub Total:	**$4,623,756.16**

Section Bridge 10A, Temp. Ramp CDE Detour Bridge

Item Number	Quantity	Units	Unit Price	Item Description	Cost
541-5446	2	Lump Sum	192000.00	DETOUR BRIDGE, 24 FT X 240 FT, STA-	384000.00
				Section Sub Total:	**$384,000.00**

Section Bridge 11, Ramp CDE Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	644	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	26474.84
211-0300	644	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	19088.16
441-0004	3127	SY	43.13	CONC SLOPE PAV, 4 IN	134867.51
500-0100	18439	SY	4.19	GROOVED CONCRETE	77259.41
500-1006	4550	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	3237143.00
500-2100	6263	LF	39.86	CONCRETE BARRIER	249643.18
500-3002	5221	CY	470.98	CLASS AA CONCRETE	2458986.58
507-9002	664	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	74520.72
507-9003	3035	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	424991.05
507-9031	29354	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	5233818.20
511-1000	835345	LB	0.89	BAR REINF STEEL	743457.05
511-3000	1023832	LS	0.96	SUPERSTR REINF STEEL, BR NO -	982878.72
520-1147	13680	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	1061020.80
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
627-1020	2000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	109340.00
				Section Sub Total:	**$15,145,687.38**

Section Bridge 12, Ramp ISE Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	286	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	8477.04
500-0100	4211	SY	4.19	GROOVED CONCRETE	17644.09
500-1006	1002	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	712882.92
500-2100	1775	LF	39.86	CONCRETE BARRIER	70751.50
500-3002	2049	CY	470.98	CLASS AA CONCRETE	965038.02
507-9003	586	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	82057.58
507-9031	4545	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	810373.50
507-9033	1082	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	235410.74
511-1000	327851	LB	0.89	BAR REINF STEEL	291787.39
511-3000	225427	LS	0.96	SUPERSTR REINF STEEL, BR NO -	216409.92
520-1147	6300	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	488628.00
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
				Section Sub Total:	**$4,211,658.86**

Section Bridge 13, Ramp INE Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	334	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	9899.76
500-0100	5198	SY	4.19	GROOVED CONCRETE	21779.62
500-1006	1233	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	877230.18
500-2100	3010	LF	39.86	CONCRETE BARRIER	119978.60
500-3002	2520	CY	470.98	CLASS AA CONCRETE	1186869.60
507-9003	1125	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	157533.75
507-9031	1910	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	340553.00
507-9033	4704	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	1023449.28
511-1000	403125	LB	0.89	BAR REINF STEEL	358781.25
511-3000	277413	LS	0.96	SUPERSTR REINF STEEL, BR NO -	266316.48
520-1147	7260	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	563085.60
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
				Section Sub Total:	**$5,237,675.28**

Section Bridge 14, Ramp IWS Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	334	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	9899.76
500-0100	5371	SY	4.19	GROOVED CONCRETE	22504.49
500-1006	1276	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	907822.96
500-2100	3116	LF	39.86	CONCRETE BARRIER	124203.76
500-3002	2520	CY	470.98	CLASS AA CONCRETE	1186869.60
507-9003	1280	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	179238.40
507-9031	917	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	163501.10
507-9033	6008	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	1307160.56
511-1000	403125	LB	0.89	BAR REINF STEEL	358781.25
511-3000	287208	LS	0.96	SUPERSTR REINF STEEL, BR NO -	275719.68
520-1147	7260	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	563085.60
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
				Section Sub Total:	**$5,410,985.32**

Section Bridge 15, Ramp IWN Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	286	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	8477.04
500-0100	4737	SY	4.19	GROOVED CONCRETE	19848.03
500-1006	1136	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	808218.56
500-2100	2012	LF	39.86	CONCRETE BARRIER	80198.32
500-3002	2115	CY	470.98	CLASS AA CONCRETE	996122.70
507-9003	674	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	94380.22
507-9033	6362	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	1384180.34
511-1000	338349	LB	0.89	BAR REINF STEEL	301130.61
511-3000	255507	LS	0.96	SUPERSTR REINF STEEL, BR NO -	245286.72
520-1147	6300	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	488628.00
522-1000	1	LS	44100.49	SHORING	44100.49
525-1000	3	EA	13044.47	COFFERDAM	39133.41
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
				Section Sub Total:	**$4,738,668.70**

Section Bridge 16, Ramp CDWS Over Ocmulgee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0300	286	CY	29.64	BRIDGE EXCAVATION, STREAM CROSSING	8477.04
500-0100	5971	SY	4.19	GROOVED CONCRETE	25018.49
500-1006	1394	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	991775.24
500-2100	1947	LF	39.86	CONCRETE BARRIER	77607.42
500-3002	2267	CY	470.98	CLASS AA CONCRETE	1067711.66
507-9003	1680	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	235250.40
507-9030	3240	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	573220.80
507-9033	9738	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	2118696.66
511-1000	362780	LB	0.89	BAR REINF STEEL	322874.20
511-3000	313557	LS	0.96	SUPERSTR REINF STEEL, BR NO -	301014.72
520-1147	6420	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	497935.20
525-1000	3	EA	13044.47	COFFERDAM	39133.41
540-1101	2	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	172368.46
603-2024	4606	SY	45.91	STN DUMPED RIP RAP, TP 1, 24 IN	211461.46
603-7000	4606	SY	3.80	PLASTIC FILTER FABRIC	17502.80
627-1020	2000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	109340.00
				Section Sub Total:	**$6,769,387.96**

Section Bridge 17, Pedestrian Trail Connector East

Item Number	Quantity	Units	Unit Price	Item Description	Cost
501-3000	806610	LS	3.09	STR STEEL, BR NO -	2492424.90

Section Sub Total:	**$2,492,424.90**

Section Bridge 18, Detour Ramp CDNE Over NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	24	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	986.64
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	832	SY	4.19	GROOVED CONCRETE	3486.08
500-1006	166	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	118102.36
500-2100	456	LF	39.86	CONCRETE BARRIER	18176.16
500-3002	155	CY	470.98	CLASS AA CONCRETE	73001.90
507-9002	600	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	67338.00
507-9030	545	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	96421.40
511-1000	22811	LB	0.89	BAR REINF STEEL	20301.79
511-3000	45227	LS	0.96	SUPERSTR REINF STEEL, BR NO -	43417.92
520-1147	900	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	69804.00
522-1000	1	LS	44100.49	SHORING	44100.49
				Section Sub Total:	**$631,045.54**

Section Bridge 19, Ramp CDNE Over NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	49	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2014.39
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1028	SY	4.19	GROOVED CONCRETE	4307.32
500-1006	199	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	141580.54
500-2100	458	LF	39.86	CONCRETE BARRIER	18255.88
500-3002	238	CY	470.98	CLASS AA CONCRETE	112093.24
507-9003	720	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	100821.60
507-9030	654	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	115705.68
511-1000	35057	LB	0.89	BAR REINF STEEL	31200.73
511-3000	54175	LS	0.96	SUPERSTR REINF STEEL, BR NO -	52008.00
520-1147	1440	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	111686.40
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
				Section Sub Total:	**$851,766.81**

Section Bridge 20, Ramp INE Over Ramps ISE,CDSE, and NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	73	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	3001.03
441-0004	880	SY	43.13	CONC SLOPE PAV, 4 IN	37954.40
500-0100	2042	SY	4.19	GROOVED CONCRETE	8555.98
500-1006	425	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	302370.50
500-2100	799	LF	39.86	CONCRETE BARRIER	31848.14
500-3002	374	CY	470.98	CLASS AA CONCRETE	176146.52
507-9002	310	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	34791.30
507-9030	1688	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	298640.96
511-1000	54909	LB	0.89	BAR REINF STEEL	48869.01
511-3000	115638	LS	0.96	SUPERSTR REINF STEEL, BR NO -	111012.48
520-1147	2040	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	158222.40
627-1020	3000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	164010.00
				Section Sub Total:	**$1,375,422.72**

Section Bridge 21, Ramp IWS Over Ramps ISE, CDSE, and NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	73	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	3001.03
441-0004	880	SY	43.13	CONC SLOPE PAV, 4 IN	37954.40
500-0100	1933	SY	4.19	GROOVED CONCRETE	8099.27
500-1006	399	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	283872.54
500-2100	750	LF	39.86	CONCRETE BARRIER	29895.00
500-3002	390	CY	470.98	CLASS AA CONCRETE	183682.20
507-9002	480	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	53870.40
507-9030	2520	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR	445838.40

				NO -	
511-1000	57377	LB	0.89	BAR REINF STEEL	51065.53
511-3000	108547	LS	0.96	SUPERSTR REINF STEEL, BR NO -	104205.12
520-1147	2040	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	158222.40
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
627-1020	3000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	164010.00
				Section Sub Total:	**$1,609,900.52**

Section Bridge 22, Ramp CDWS Over Ramps ISE,CDSE, and NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	73	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	3001.03
441-0004	880	SY	43.13	CONC SLOPE PAV, 4 IN	37954.40
500-0100	1521	SY	4.19	GROOVED CONCRETE	6372.99
500-1006	285	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	202766.10
500-2100	565	LF	39.86	CONCRETE BARRIER	22520.90
500-3002	376	CY	470.98	CLASS AA CONCRETE	177088.48
507-9002	1002	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	112454.46
507-9003	1258	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	176157.74
511-1000	55238	LB	0.89	BAR REINF STEEL	49161.82
511-3000	77595	LS	0.96	SUPERSTR REINF STEEL, BR NO -	74491.20
520-1147	2040	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	158222.40
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$1,238,871.52**

Section Bridge 23, I-75 Over Ramps ISE,CDSE, and NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	382	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	15704.02
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	6080	SY	4.19	GROOVED CONCRETE	25475.20
500-1006	1202	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	855174.92
500-2100	2028	LF	39.86	CONCRETE BARRIER	80836.08
500-3002	2834	CY	470.98	CLASS AA CONCRETE	1334757.32
507-9003	3680	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	515310.40
507-9033	4432	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	964270.24
511-1000	416668	LB	0.89	BAR REINF STEEL	370834.52
511-3000	327058	LS	0.96	SUPERSTR REINF STEEL, BR NO -	313975.68
520-1147	10680	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	828340.80
522-1000	1	LS	44100.49	SHORING	44100.49
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
				Section Sub Total:	**$5,510,872.70**

Section Bridge 24, Ramp N Over Ramps ISE,CDSE, and NSRR

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	191	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	7852.01
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1885	SY	4.19	GROOVED CONCRETE	7898.15
500-1006	438	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	311619.48
500-2100	1185	LF	39.86	CONCRETE BARRIER	47234.10
500-3002	1265	CY	470.98	CLASS AA CONCRETE	595789.70
507-9003	411	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	57552.33
507-9030	624	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	110398.08
507-9031	1500	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	267450.00
507-9033	1020	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	221921.40
511-1000	185890	LB	0.89	BAR REINF STEEL	165442.10
511-3000	119271	LS	0.96	SUPERSTR REINF STEEL, BR NO -	114500.16
520-1147	5280	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	409516.80
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
				Section Sub Total:	**$2,479,267.34**

Section Bridge 25, Ramp IWS Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	49	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2014.39
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1578	SY	4.19	GROOVED CONCRETE	6611.82
500-1006	314	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	223398.44
500-2100	590	LF	39.86	CONCRETE BARRIER	23517.40
500-3002	434	CY	470.98	CLASS AA CONCRETE	204405.32
507-9003	1466	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	205283.98
507-9033	761	LF	217.57	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO -	165570.77
507-9240	540	LF	300.00	PSC BEAMS, SPCL DESIGN, BR NO -	162000.00
509-0001	3	Lump Sum	25000.00	PRESTRESSING CAST-IN-PLACE CONC, BR NO -	75000.00
511-1000	63760	LB	0.89	BAR REINF STEEL	56746.40
511-3000	85391	LS	0.96	SUPERSTR REINF STEEL, BR NO -	81975.36
520-1147	1560	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	120993.60
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
627-1020	7000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	382690.00
				Section Sub Total:	**$1,872,300.51**

Section Bridge 26, Ramp CDWS Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	37	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	1521.07
441-0004	1760	SY	43.13	CONC SLOPE PAV, 4 IN	75908.80
500-0100	1282	SY	4.19	GROOVED CONCRETE	5371.58
500-1006	243	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	172884.78
500-2100	457	LF	39.86	CONCRETE BARRIER	18216.02
500-3002	333	CY	470.98	CLASS AA CONCRETE	156836.34
507-9003	789	LF	140.03	PSC BEAMS, AASHTO TYPE III, BR NO -	110483.67
507-9030	1039	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	183819.88
511-1000	48909	LB	0.89	BAR REINF STEEL	43529.01
511-3000	66140	LS	0.96	SUPERSTR REINF STEEL, BR NO -	63494.40
520-1147	1320	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	102379.20
627-1020	5000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	273350.00
				Section Sub Total:	**$1,207,794.75**

Section Bridge 26A, Ramp CDWS Temporary Bridge Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
541-5420	1	Lump Sum	109250.00	DETOUR BRIDGE, 24 FT X 100 FT, STA -	109250.00
				Section Sub Total:	**$109,250.00**

Section Bridge 27, Riverside Drive Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	73	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	3001.03
441-0004	880	SY	43.13	CONC SLOPE PAV, 4 IN	37954.40
500-0100	2698	SY	4.19	GROOVED CONCRETE	11304.62
500-1006	781	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	555650.26
500-2100	851	LF	39.86	CONCRETE BARRIER	33920.86
500-3002	445	CY	470.98	CLASS AA CONCRETE	209586.10
507-9030	1560	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	275995.20
507-9032	3973	LF	201.35	PSC BEAMS, AASHTO, BULB TEE, 72 IN, BR NO -	799963.55
511-1000	65374	LB	0.89	BAR REINF STEEL	58182.86
511-3000	212397	LS	0.96	SUPERSTR REINF STEEL, BR NO -	203901.12
520-1147	2340	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	181490.40
522-1000	1	LS	44100.49	SHORING	44100.49
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
627-1020	3000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	164010.00
				Section Sub Total:	**$2,665,245.12**

Section Bridge 28, Walnut Street Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	24	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	986.64
500-0100	1679	SY	4.19	GROOVED CONCRETE	7035.01
500-1006	437	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	310908.02
500-2100	485	LF	39.86	CONCRETE BARRIER	19332.10
500-3002	148	CY	470.98	CLASS AA CONCRETE	69705.04
507-9030	1168	LF	176.92	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	206642.56
507-9031	1255	LF	178.30	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO -	223766.50
511-1000	21772	LB	0.89	BAR REINF STEEL	19377.08
511-3000	118766	LS	0.96	SUPERSTR REINF STEEL, BR NO -	114015.36
520-1147	1200	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	93072.00
522-1000	1	LS	44100.49	SHORING	44100.49
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$1,413,805.03**

Section Bridge 29, Ramp M Over Ramp INE

Item Number	Quantity	Units	Unit Price	Item Description	Cost
211-0200	49	CY	41.11	BRIDGE EXCAVATION, GRADE SEPARATION	2014.39
500-0100	1141	SY	4.19	GROOVED CONCRETE	4780.79
500-1006	236	LS	711.46	SUPERSTR CONCRETE, CL AA, BR NO -	167904.56
500-2100	736	LF	39.86	CONCRETE BARRIER	29336.96
500-3002	298	CY	470.98	CLASS AA CONCRETE	140352.04
507-9002	1540	LF	112.23	PSC BEAMS, AASHTO TYPE II, BR NO -	172834.20
511-1000	43787	LB	0.89	BAR REINF STEEL	38970.43
511-3000	64264	LS	0.96	SUPERSTR REINF STEEL, BR NO -	61693.44
520-1147	2820	LF	77.56	PILING IN PLACE, STEEL H, HP 14 X 73	218719.20
522-1000	1	LS	44100.49	SHORING	44100.49
627-1020	4000	SF	54.67	MSE WALL FACE, 20 - 30 FT HT, WALL NO -	218680.00
				Section Sub Total:	**$1,099,386.50**

Section Bridge 30, Pedestrian Bridge Over I-75

Item Number	Quantity	Units	Unit Price	Item Description	Cost
501-3000	806610	LS	3.09	STR STEEL, BR NO -	2492424.90
540-1101	1	LS	86184.23	REMOVAL OF EXISTING BR, STA NO -	86184.23
				Section Sub Total:	**$2,578,609.13**

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
162-1300	300	EA	189.43	EROSION CONTROL CHECK DAM, TP -	56829.00
163-0232	40	AC	283.37	TEMPORARY GRASSING	11334.80
163-0240	1700	TN	129.90	MULCH	220830.00
163-0300	50	EA	1148.70	CONSTRUCTION EXIT	57435.00
163-0501	5	EA	839.99	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	4199.95
163-0502	15	EA	399.64	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 2	5994.60
163-0503	50	EA	442.20	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	22110.00
163-0504	300	EA	425.00	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 4	127500.00
163-0520	50000	LF	12.55	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	627500.00
163-0521	500	EA	218.40	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	109200.00
163-0530	33000	LF	2.42	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	79860.00
163-0531	3	EA	7381.63	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	22144.89
163-0550	500	EA	188.29	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	94145.00

165-0010	62500	LF	0.53	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	33125.00
165-0020	1250	LF	1.43	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	1787.50
165-0030	270000	LF	0.66	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	178200.00
165-0040	800	EA	56.18	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	44944.00
165-0050	6000	LF	2.45	MAINTENANCE OF SILT RETENTION BARRIER	14700.00
165-0060	3	EA	1698.39	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	5095.17
165-0070	16500	LF	2.83	MAINTENANCE OF BALED STRAW EROSION CHECK	46695.00
165-0085	5	EA	339.92	MAINTENANCE OF SILT CONTROL GATE, TP 1	1699.60
165-0086	15	EA	199.64	MAINTENANCE OF SILT CONTROL GATE, TP 2	2994.60
165-0087	50	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	5674.00
165-0088	300	EA	100.00	MAINTENANCE OF SILT CONTROL GATE, TP 4	30000.00
165-0101	50	EA	481.34	MAINTENANCE OF CONSTRUCTION EXIT	24067.00
165-0105	500	EA	78.69	MAINTENANCE OF INLET SEDIMENT TRAP	39345.00
167-1000	2	EA	460.30	WATER QUALITY MONITORING AND SAMPLING	920.60
167-1500	36	MO	685.80	WATER QUALITY INSPECTIONS	24688.80
170-2000	6000	LF	8.24	STAKED SILT RETENTION BARRIER	49440.00
171-0010	125000	LF	1.84	TEMPORARY SILT FENCE, TYPE A	230000.00
171-0020	2500	LF	2.84	TEMPORARY SILT FENCE, TYPE B	7100.00
171-0030	540000	LF	2.95	TEMPORARY SILT FENCE, TYPE C	1593000.00
603-2012	92000	SY	41.29	STN DUMPED RIP RAP, TP 1, 12 IN	3798680.00
603-7000	92000	SY	3.80	PLASTIC FILTER FABRIC	349600.00
700-6910	118	AC	674.07	PERMANENT GRASSING	79540.26
700-7000	240	TN	60.51	AGRICULTURAL LIME	14522.40
700-7010	200	GL	20.53	LIQUID LIME	4106.00
700-8000	8	TN	409.57	FERTILIZER MIXED GRADE	3276.56
700-8100	4000	LB	2.30	FERTILIZER NITROGEN CONTENT	9200.00
710-9000	90000	SY	1.99	PERMANENT SOIL REINFORCING MAT	179100.00
715-2200	60000	SY	1.47	BITUMINOUS TREATED ROVING, WATERWAYS	88200.00
716-2000	340000	SY	0.95	EROSION CONTROL MATS, SLOPES	323000.00
				Section Sub Total:	**$8,621,784.73**

Section Signing, Striping, and Lighting

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3101	3	CY	238.02	CLASS A CONCRETE	714.06
610-6520	5	EA	865.78	REM HIGHWAY SIGN, SPCL ROADSIDE	4328.90
610-9310	6	LS	13235.29	REM STR SUPPORT, TP -	79411.74
636-1072	5360	SF	30.53	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3	163640.80
636-3000	660	LB	3.89	GALV STEEL STR SHAPE POST	2567.40
636-5010	40	EA	46.28	DELINEATOR, TP 1	1851.20
636-5011	20	EA	32.24	DELINEATOR, TP 1A	644.80
636-5020	4	EA	50.96	DELINEATOR, TP 2	203.84
638-1001	13	LS	57694.98	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA -	750034.74
638-1003	1	LS	44524.20	STR SUPPORT FOR OVERHEAD SIGN, TP III, STA -	44524.20
638-1007	3	LS	18125.00	STR SUPPORT FOR OVERHEAD SIGN, TP VII, STA -	54375.00
653-1501	21600	LF	0.44	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	9504.00
653-1502	24200	LF	0.45	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	10890.00
653-1810	2600	LF	1.46	THERMOPLASTIC SOLID TRAF STRIPE, 10 IN, WHITE	3796.00
653-3501	21400	GLF	0.33	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	7062.00
654-1003	400	EA	3.20	RAISED PVMT MARKERS TP 3	1280.00
655-5000	1	EA	420.00	PVMT ARROW, THERMOPLASTIC, WITH RAISED REFLECTORS	420.00
657-1085	28400	LF	5.36	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	152224.00

657-1104	5000	LF	6.67	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	33350.00
657-3085	28400	GLF	4.09	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	116156.00
657-6085	24400	LF	5.29	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	129076.00
				Section Sub Total:	**$1,566,054.68**

Total Estimated Cost: $149,532,940.64

Subtotal Construction Cost	**$149,532,940.64**
E&C Rate 10.0 %	$14,953,294.06
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$164,486,234.70**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$164,486,234.70**

Preliminary Right of Way Cost Estimate

Date: January 2, 2009
Project: NHIM0-0016-01(092) Bibb **P.I. Number** 311000
Existing/Required R/W: Varies/Varies **No. Parcels** 17
Project Termini:
Project Description: I-16 from I-75 to Coliseum Dr.

Right of Way									
Heavy Commerial									
	353,186	sf	@	$	2.50	/sf =	$	882,965	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	0	sf	@	$	1.05	/sf =	$	0	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
								$	882,965
Permanent Construction Easement:									
Heavy Commerial									
	32,654	sf	@	$	1.25	/sf =	$	40,818	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	719	sf	@	$	0.55	/sf =	$	395	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
								$	41,213
Improvements:									
Residential						=	$		
Commercial	car dealership buildings, asphalt, etc.					=	$	500,000	
								$	500,000
Relocation:									
Residential	0 @ $40,000 /parcel					=	$	0	
Commercial	1 @ $25,000 /parcel					=	$	25,000	
								$	25,000
Damages:									
Proximity -	Parcels						$	0	
Consequential -	Parcels						$	0	
Cost To Cure -	Parcels						$	0	
								$	0
								$	1,449,178

Net Cost		$	1,449,178
Scheduling Contingency	55%	$	797,048
Adm/Court Cost	60%	$	1,347,736
		$	3,593,962

Total Cost $ 3,594,000

Prepared By : _____
Moreland Altobelli Associates, Inc.

Approved : _____
GDOT R/W

NOTE: This estimate assumes a total land donation of 371,023 sf on 5 parcels owned by the city, county, and/or state.
NOTE: This update is based on estimate by consultant dated 1/2/09.
NOTE: Accuracy of estimate is the sole responsibility of the Preparer.
NOTE: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.

Preliminary Right of Way Cost Estimate

Date: January 2, 2009
Project: NHIM0-0016-01(131) Bibb **P.I. Number** 311005
Existing/Required R/W: Varies/Varies **No. Parcels** 6
Project Termini:
Project Description: I-16 /Coliseum Dr

Right of Way									
Heavy Commerial									
	19,605	sf	@	$	2.50	/sf =	$	49,013	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	0	sf	@	$	1.05	/sf =	$	0	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
								$	49,013
Permanent Construction Easement:									
Heavy Commerial									
	10,980	sf	@	$	1.25	/sf =	$	13,725	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	0	sf	@	$	0.55	/sf =	$	0	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
								$	13,725
Improvements:									
Residential	none					=	$		
Commercial	none					=	$		
								$	0
Relocation:									
Residential	0	@	$40,000	/parcel		=	$	0	
Commercial	0	@	$25,000	/parcel		=	$	0	
								$	0
Damages:									
Proximity -		Parcels					$	0	
Consequential -		Parcels					$	0	
Cost To Cure -		Parcels			1		$	25,000	
								$	25,000
								$	87,738

Net Cost		$	87,738
Scheduling Contingency	55%	$	48,256
Adm/Court Cost	60%	$	81,596
		$	217,590

Total Cost $ 218,000

Prepared By : _____
Moreland Altobelli Associates, Inc.

Approved : _____
GDOT R/W

NOTE: This estimate assumes a total land donation of 42,048 sf on 3 parcels owned by the city, county, and/or state.
NOTE: This update is based on estimate by consultant dated 1/2/09.
NOTE: Accuracy of estimate is the sole responsibility of the Preparer.
NOTE: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.

Preliminary Right of Way Cost Estimate

Date: January 2, 2009
Project: NHIM0-0075-02(177) Bibb **P.I. Number** 311400
Existing/Required R/W: Varies/Varies **No. Parcels** 4
Project Termini:
Project Description: I-75 from I-16 to Pierce Ave.

Right of Way

Heavy Commerial								
	0	sf	@	$	2.50 /sf =	$	0	
Light Commercial								
	0	sf	@	$	0.00 /sf =	$	0	
Premium Residential								
	0	sf	@	$	1.05 /sf =	$	0	
Average Residential								
	0	sf	@	$	0.00 /sf =	$	0	
Large Residential tracts								
	0	sf	@	$	0.00 /sf =	$	0	
							$	0

Permanent Construction Easement:

Heavy Commerial								
	0	sf	@	$	1.25 /sf =	$	0	
Light Commercial								
	0	sf	@	$	0.00 /sf =	$	0	
Premium Residential								
	0	sf	@	$	0.55 /sf =	$	0	
Average Residential								
	0	sf	@	$	0.00 /sf =	$	0	
Large Residential tracts								
	0	sf	@	$	0.00 /sf =	$	0	
							$	0

Improvements:

Residential	none	=	$		
Commercial	none	=	$		
				$	0

Relocation:

Residential	0 @ $40,000 /parcel	=	$	0		
Commercial	0 @ $25,000 /parcel	=	$	0		
					$	0

Damages:

Proximity -	Parcels		$	0	
Consequential -	Parcels		$	0	
Cost To Cure -	Parcels		$	0	
				$	0
				$	0

Net Cost		$	0
Scheduling Contingency	55%	$	0
Adm/Court Cost	60%	$	0
		$	0

Total Cost $ 0

Prepared By : _____
Moreland Altobelli Associates, Inc.

Approved : _____
GDOT R/W

NOTE: This estimate assumes a total land donation of 37,004 sf on 4 parcels owned by the city, county, and/or state.
NOTE: This update is based on estimate by consultant dated 1/2/09.
NOTE: Accuracy of estimate is the sole responsibility of the Preparer.
NOTE: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.

Preliminary Right of Way Cost Estimate

Date: January 2, 2009
Project: NH000-0016-01(104) Bibb **P.I. Number** 311410
Existing/Required R/W: Varies/Varies **No. Parcels** 125
Project Termini:
Project Description: I-16/I-75 Interchange Improvements

Right of Way									
Heavy Commerial									
	29,325	sf	@	$	2.50	/sf =	$	73,313	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	246,326	sf	@	$	1.05	/sf =	$	258,642	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
									$ 331,955
Permanent Construction Easement:									
Heavy Commerial									
	5,271	sf	@	$	1.25	/sf =	$	6,589	
Light Commercial									
	0	sf	@	$	0.00	/sf =	$	0	
Premium Residential									
	76,683	sf	@	$	0.55	/sf =	$	42,176	
Average Residential									
	0	sf	@	$	0.00	/sf =	$	0	
Large Residential tracts									
	0	sf	@	$	0.00	/sf =	$	0	
									$ 48,765
Improvements:									
Residential									
32 houses,curbing, paving, signs, fencing,site improvement						=	$	2,410,181	
Commercial						=	$		
									$ 2,410,181
Relocation:									
Residential	32	@	$40,000	/parcel		=	$	1,280,000	
Commercial	0	@	$25,000	/parcel		=	$	0	
									$ 1,280,000
Damages:									
Proximity -		Parcels					$	0	
Consequential -		Parcels					$	0	
Cost To Cure -		Parcels					$	0	
									$ 0
									$ 4,070,901

Net Cost		$	4,070,901
Scheduling Contingency	55%	$	2,238,996
Adm/Court Cost	60%	$	3,785,938
		$	10,095,835

Total Cost $ 10,096,000

Prepared By : _____
Moreland Altobelli Associates, Inc.

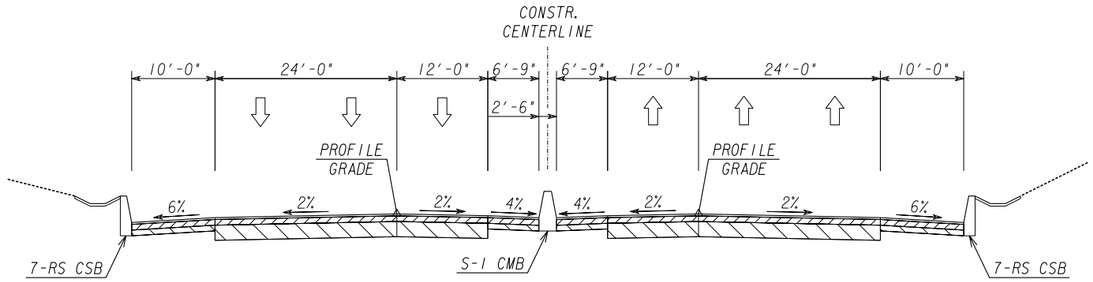
Approved : _____
GDOT R/W

NOTE: This estimate assumes a total land donation of 870,526 sf on 28 parcels owned by the city, county, and/or state.
NOTE: This update is based on estimate by consultant dated 1/2/09.
NOTE: Accuracy of estimate is the sole responsibility of the Preparer.
NOTE: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.

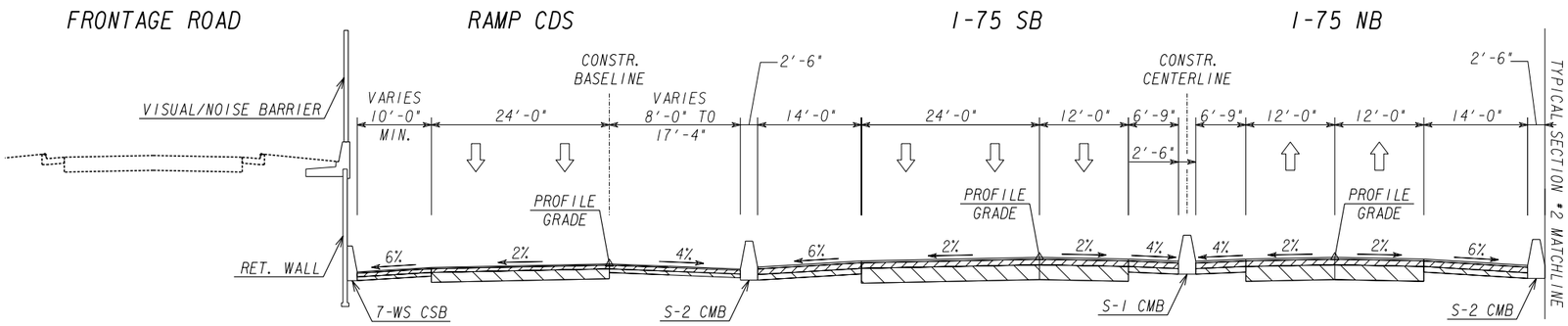
ATTACHMENT #3

TYPICAL SECTIONS

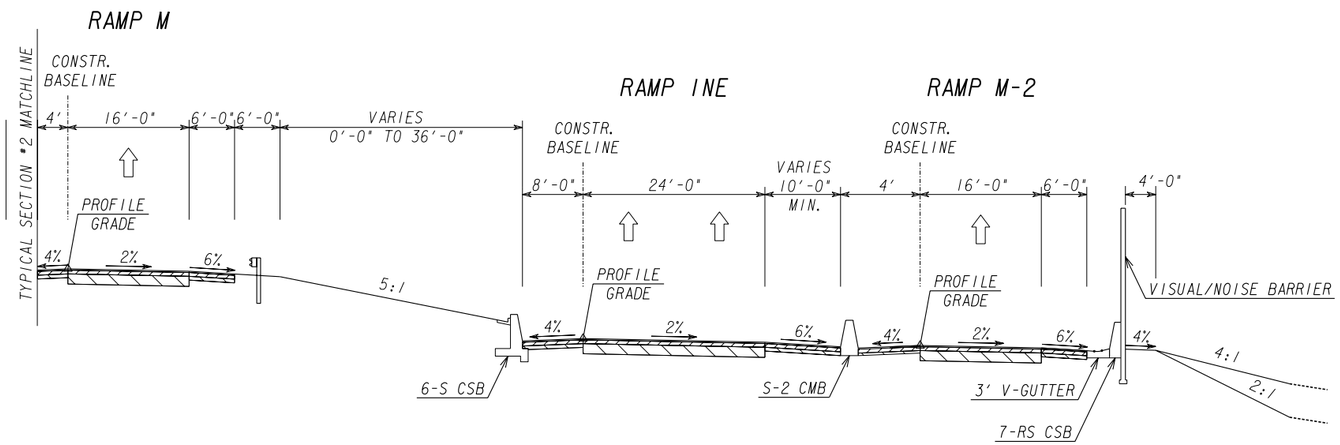
DATE$$$	TIME$$$	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		GA			



TYPICAL SECTION #1
I-75 AT HARDEMAN AVENUE
~ STA 997+00



TYPICAL SECTION #2
I-75 THRU PLEASANT HILL
~ STA 1015+00



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Telephone (770) 263-5945

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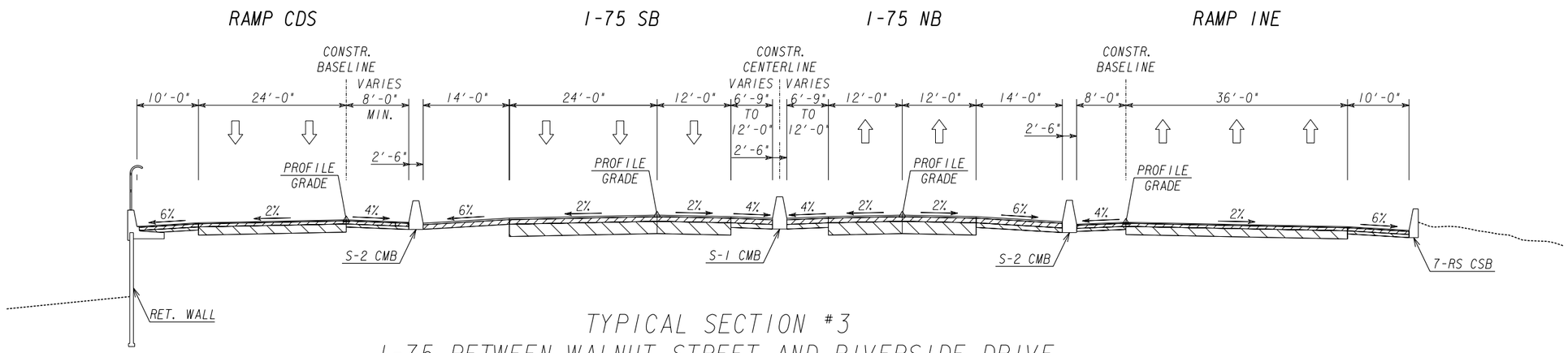
REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

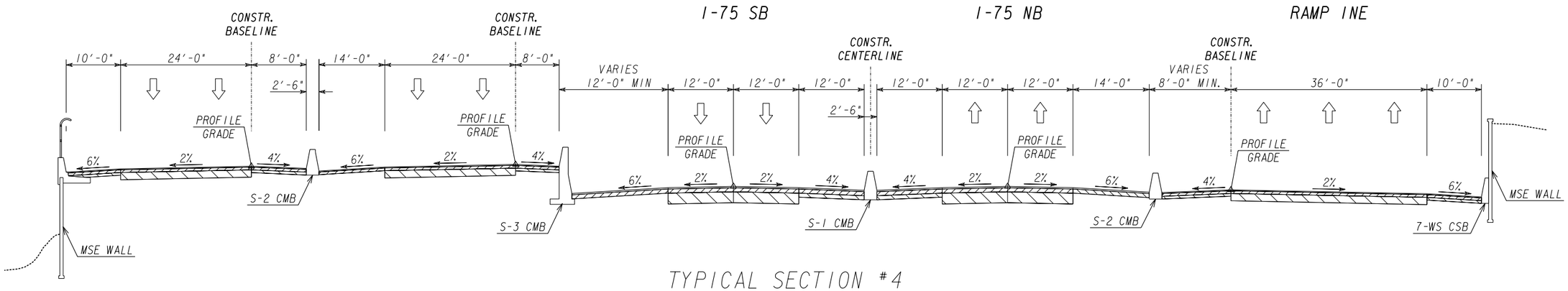
TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE
IMPROVEMENTS

DRAWING No. 5-01

DATE$$$	TIME$$$	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		GA			



TYPICAL SECTION #3
I-75 BETWEEN WALNUT STREET AND RIVERSIDE DRIVE.
~ STA 1027+00



TYPICAL SECTION #4
I-75 BETWEEN RIVERSIDE DRIVE AND I-16 INTERCHANGE
~ STA 1039+00

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TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE
IMPROVEMENTS

DRAWING No. 5-02

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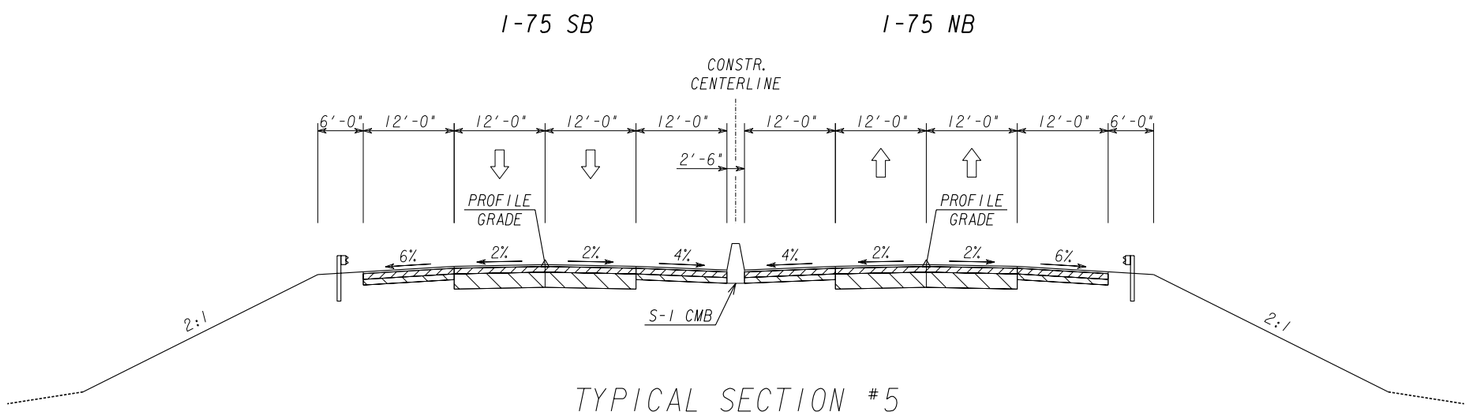
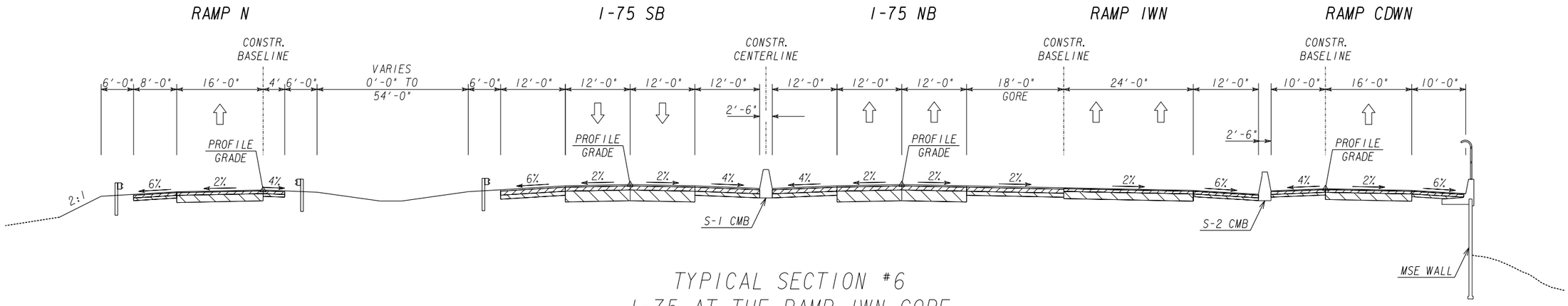


TYPICAL SECTION #5
I-75 THRU THE I-16 / I-75 INTERCHANGE
~ STA 1054+00



TYPICAL SECTION #6
I-75 AT THE RAMP IWN GORE
~ STA 1072+00

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TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE
IMPROVEMENTS

DRAWING No. 5-03

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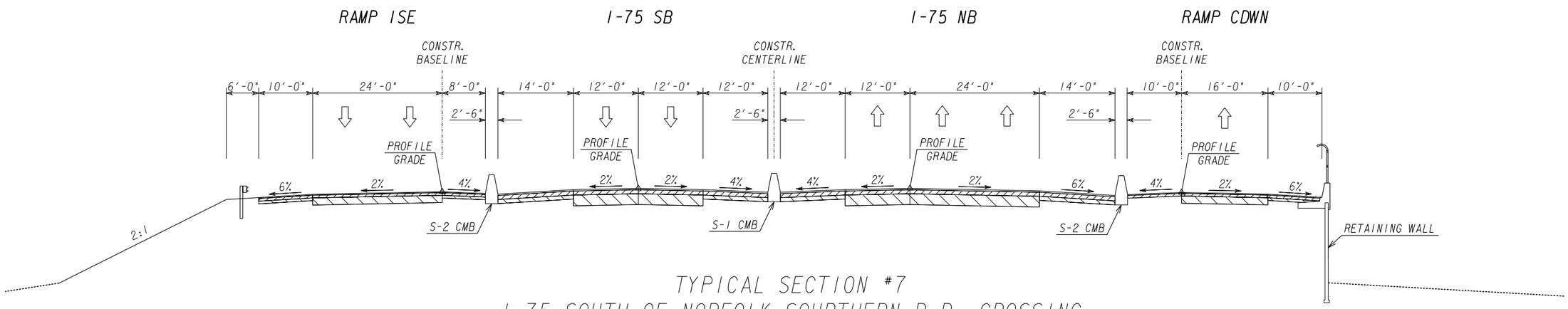
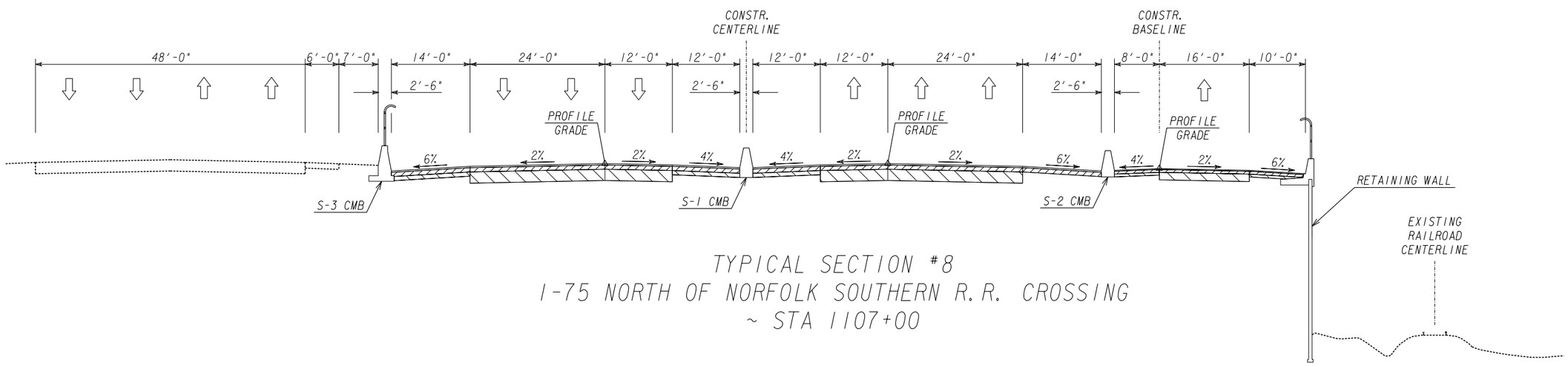


TYPICAL SECTION #7
I-75 SOUTH OF NORFOLK SOURTHERN R.R. CROSSING
~ STA 1089+00



TYPICAL SECTION #8
I-75 NORTH OF NORFOLK SOUTHERN R.R. CROSSING
~ STA 1107+00

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I-16 / I-75 INTERCHANGE
IMPROVEMENTS

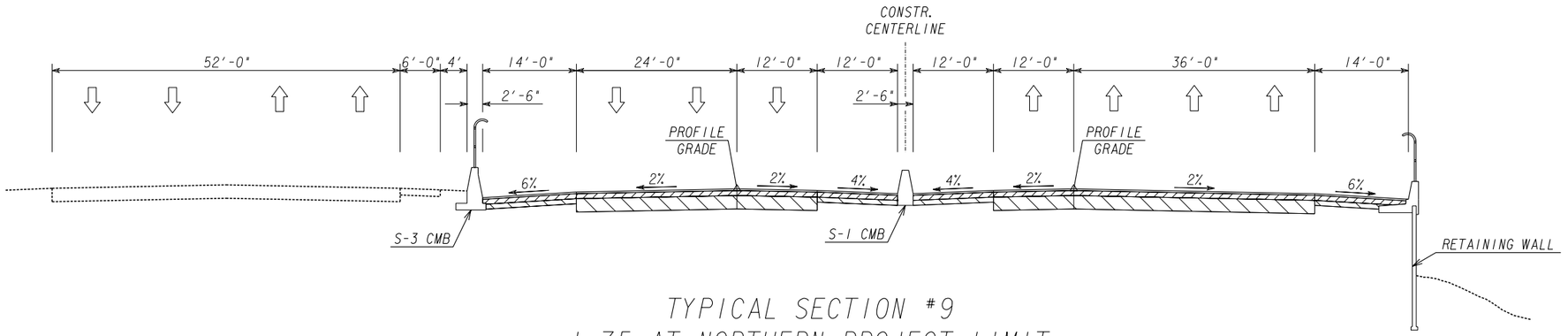
DRAWING No. 5-04

DATE$$$	TIME$$$	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		GA			

EXIST. RIVERSIDE DRIVE

I-75 SB

I-75 NB



TYPICAL SECTION #9
I-75 AT NORTHERN PROJECT LIMIT
~ STA 1122+00

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I-16 / I-75 INTERCHANGE
IMPROVEMENTS

DRAWING No. 5-05

DATE$$$	TIME$$$	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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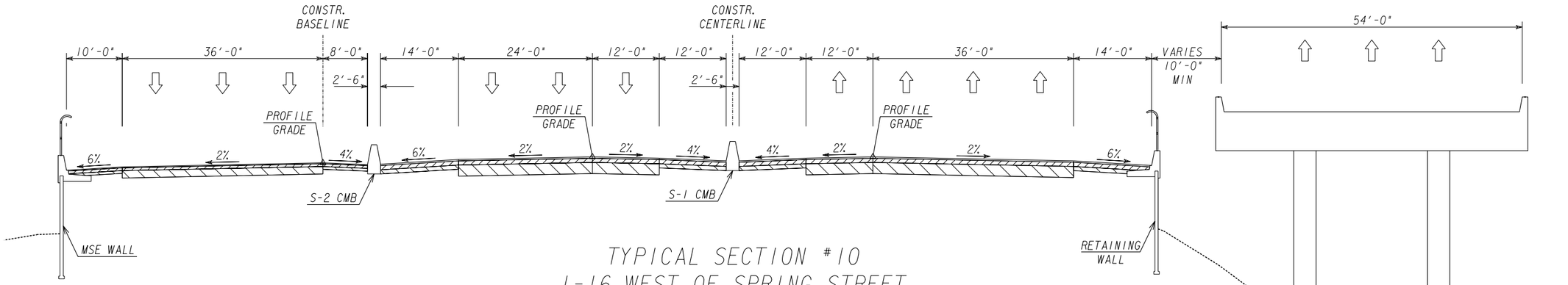
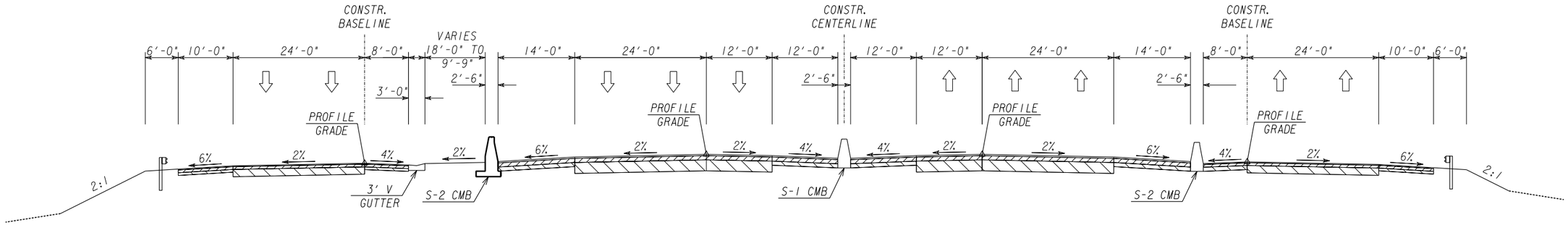
RAMP CDW I-16 WB I-16 EB RAMP CDE



TYPICAL SECTION #10
I-16 WEST OF SPRING STREET
~ STA 605+00

RAMP CDW I-16 WB I-16 EB RAMP CDE-2



TYPICAL SECTION #11
I-16 BETWEEN SPRING STREET AND SECOND STREET
~ STA 630+00

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I-16 / I-75 INTERCHANGE
IMPROVEMENTS

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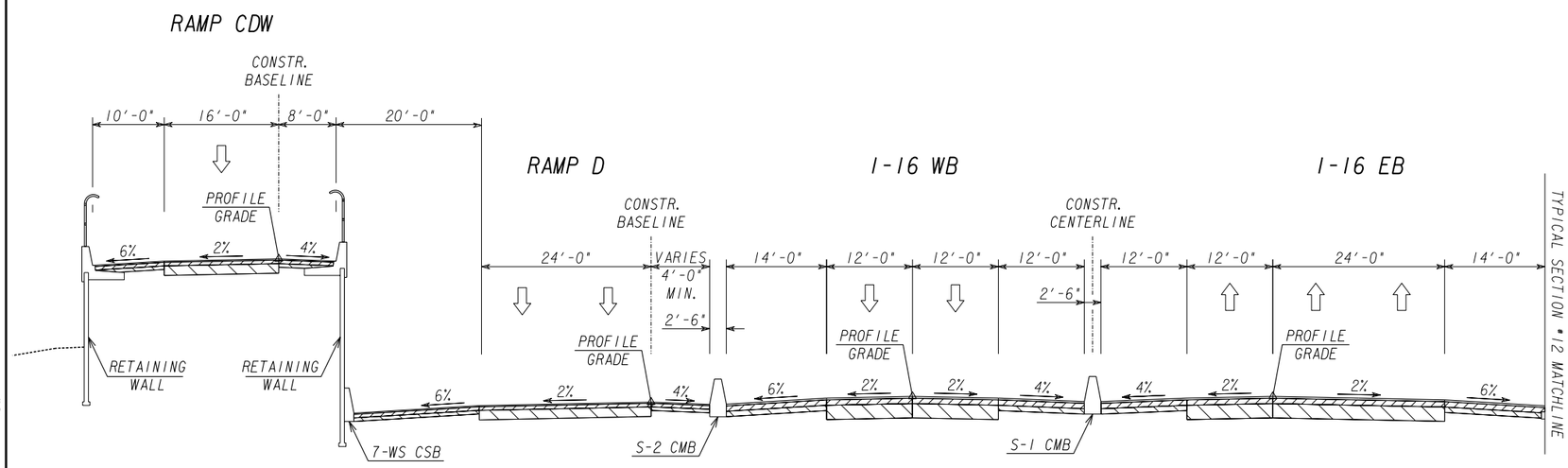
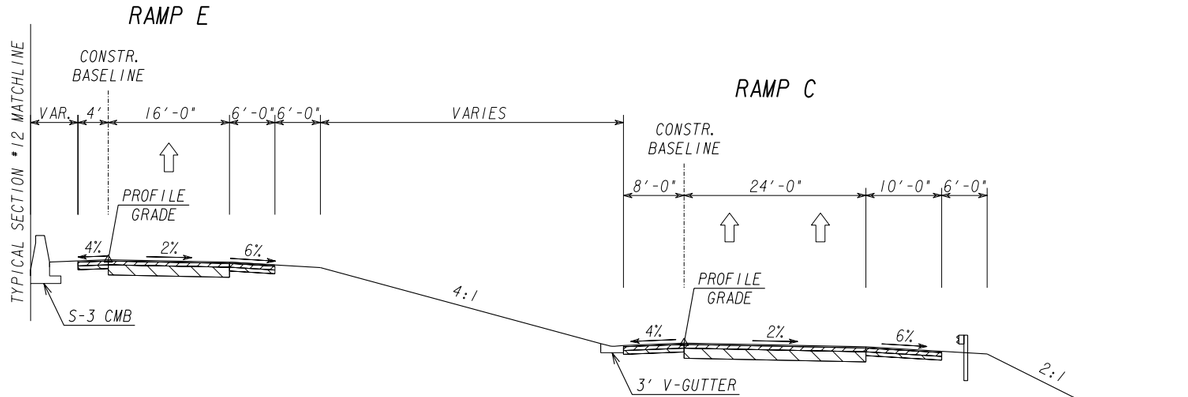


TYPICAL SECTION #12
I-16 BETWEEN SECOND STREET AND COLISEUM DRIVE
~ STA 653+00



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I-16 / I-75 INTERCHANGE
IMPROVEMENTS

DRAWING No. 5-07

DATE$$$	TIME$$$	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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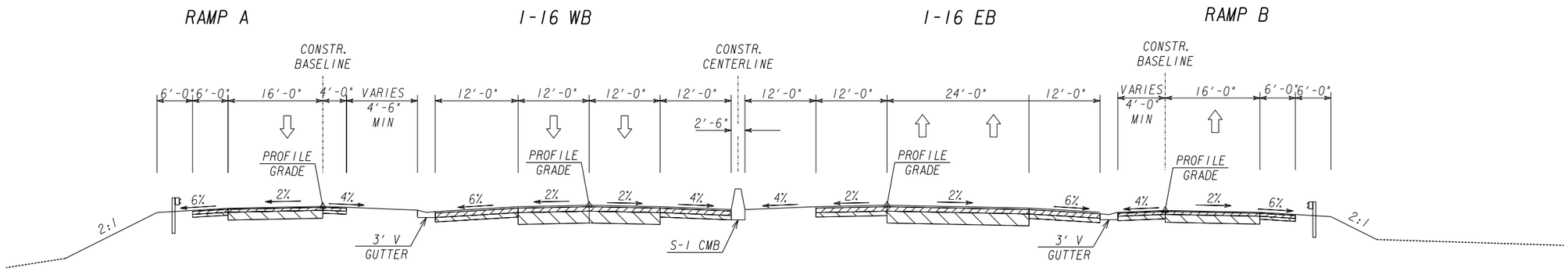

TYPICAL SECTION #13
I-16 EAST OF COLISEUM DRIVE
~ STA 680+00

				REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
		Moreland Altobelli Associates, Inc. 2211 Beaver Ruin Road Suite 190 Norcross, Georgia 30071 Telephone (770) 263-5945	NOT TO SCALE		OFFICE: TYPICAL SECTIONS I-16 / I-75 INTERCHANGE IMPROVEMENTS DRAWING No. 5-08

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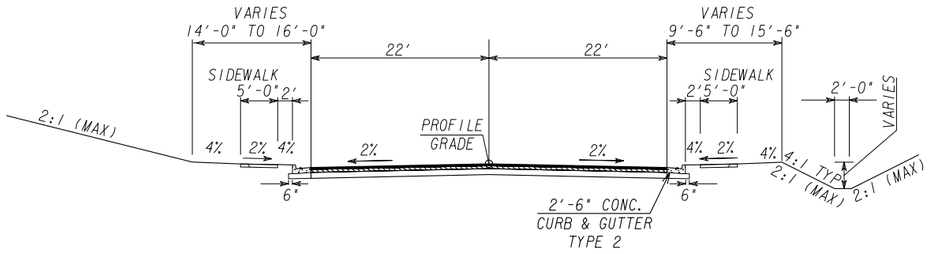
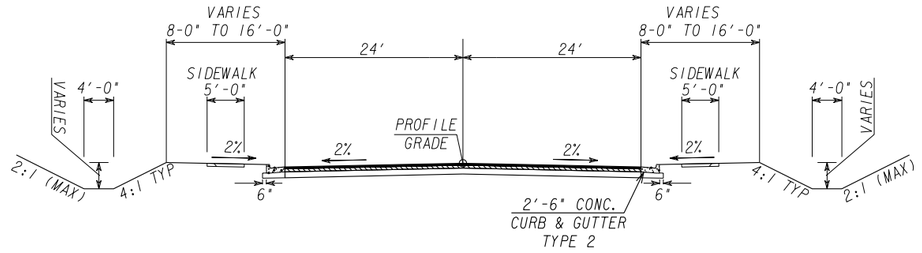
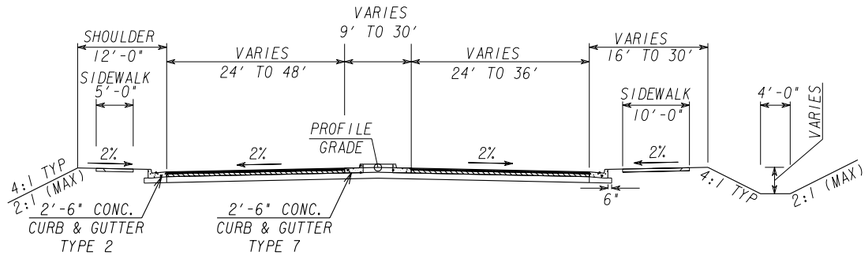


TS-14
WALNUT STREET
STA 12+00 TO STA 21+00



TS-15
RIVERSIDE DRIVE
STA 12+75 TO STA 29+00



TS-16
SECOND STREET
STA 30+22 TO STA 58+50

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

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TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE IMPROVEMENTS

DRAWING No. 5-09

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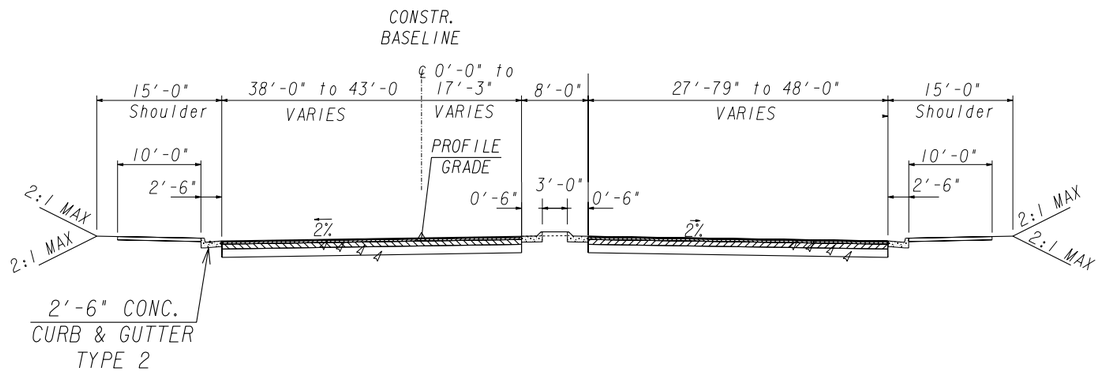
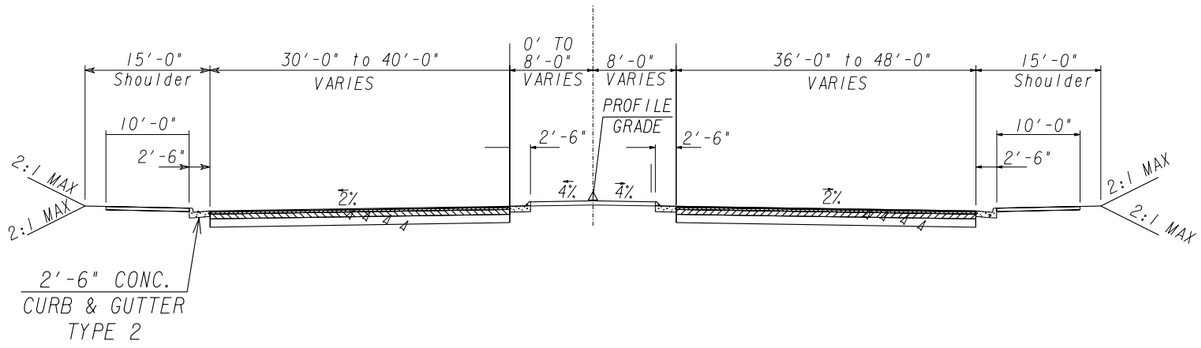


TS-17
MLK JR. BLVD/COLISEUM DR
STA 56+00 TO STA 60+96.30



TS-18
MLK JR. BLVD/COLISEUM DR
STA 60+95.94 TO STA 64+55.86

HNTB
3715 NORTHSIDE PARKWAY, NW
400 NORTHCREEK, SUITE 600
ATLANTA, GEORGIA 30327

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Norcross, Georgia 30071
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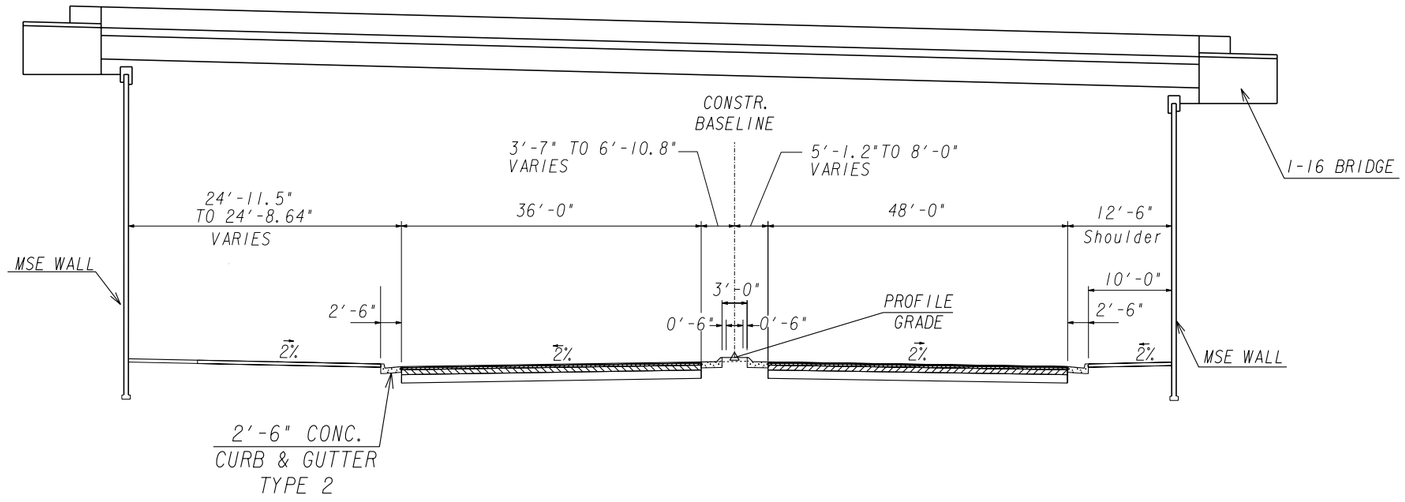
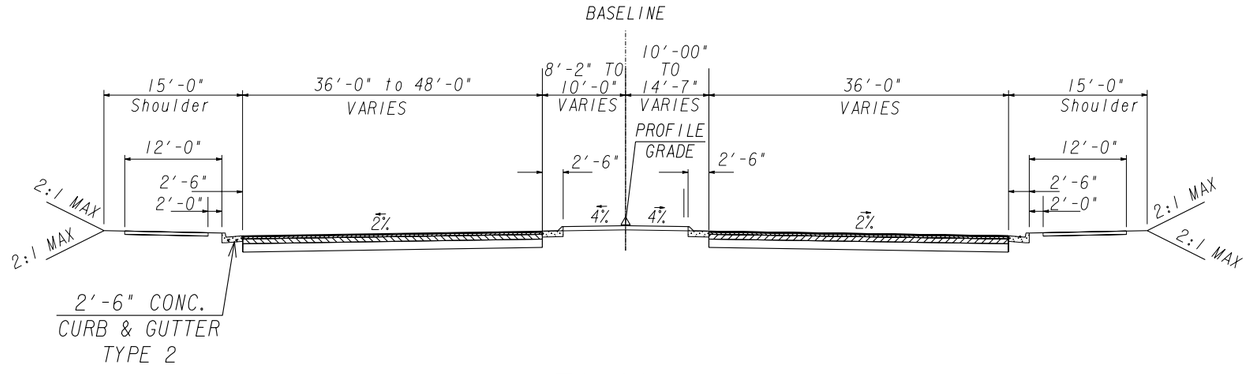
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE IMPROVEMENTS

DRAWING No. 5-10



TS-19
MLK JR. BLVD/COLISEUM DR
STA 64+55.86 TO STA 66+56.21



TS-20
MLK JR. BLVD/COLISEUM DR
STA 66+56.21 TO STA 75+00

HNTB
3715 NORTHSIDE PARKWAY, NW
400 NORTHCREEK, SUITE 600
ATLANTA, GEORGIA 30327

NOT TO SCALE

REVISION DATES		

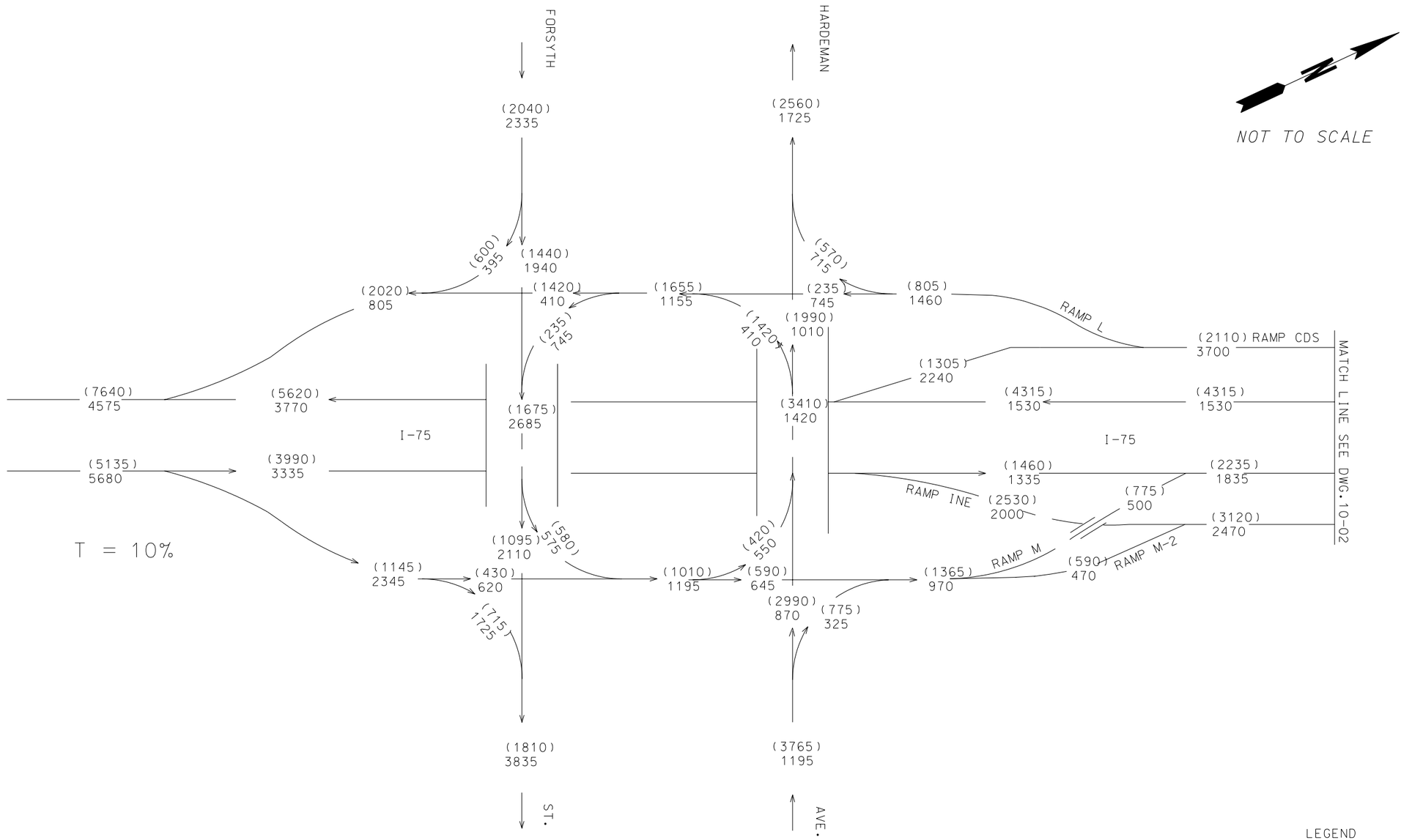
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
TYPICAL SECTIONS
I-16 / I-75 INTERCHANGE IMPROVEMENTS

DRAWING No. 5-11

ATTACHMENT #4

TRAFFIC VOLUMES

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$					



MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGNED BY:	.
DRAWN BY:	
CHECKED BY:	
SUPERVISED BY:	BRAD HALE P.E.

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC DIAGRAM PLAN

2036 AM (PM) DHV
TRAFFIC FLOW DIAGRAM

DRAWING No. 10-01

GPLN

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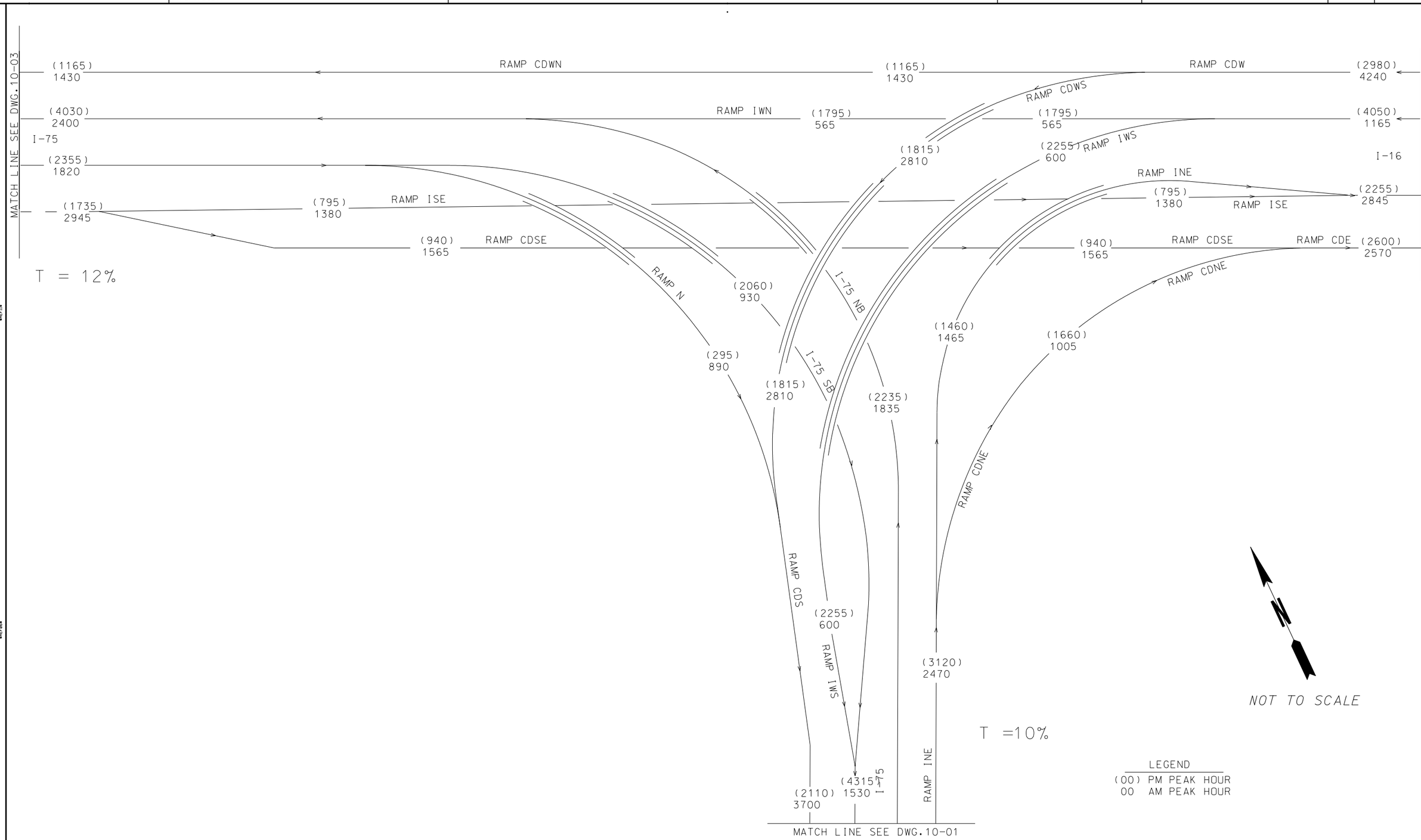
$USER$		$$PENTABLE$$					



MORELAND-ALTOBELLI ASSOC., INC. (770) 263-5945		REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION	
DESIGNED BY: .			OFFICE:	
DRAWN BY:			TRAFFIC DIAGRAM PLAN	
CHECKED BY:			2036 AM (PM) DHV TRAFFIC FLOW DIAGRAM	DRAWING No. 10-02
SUPERVISED BY: BRAD HALE P.E.				

GPLN

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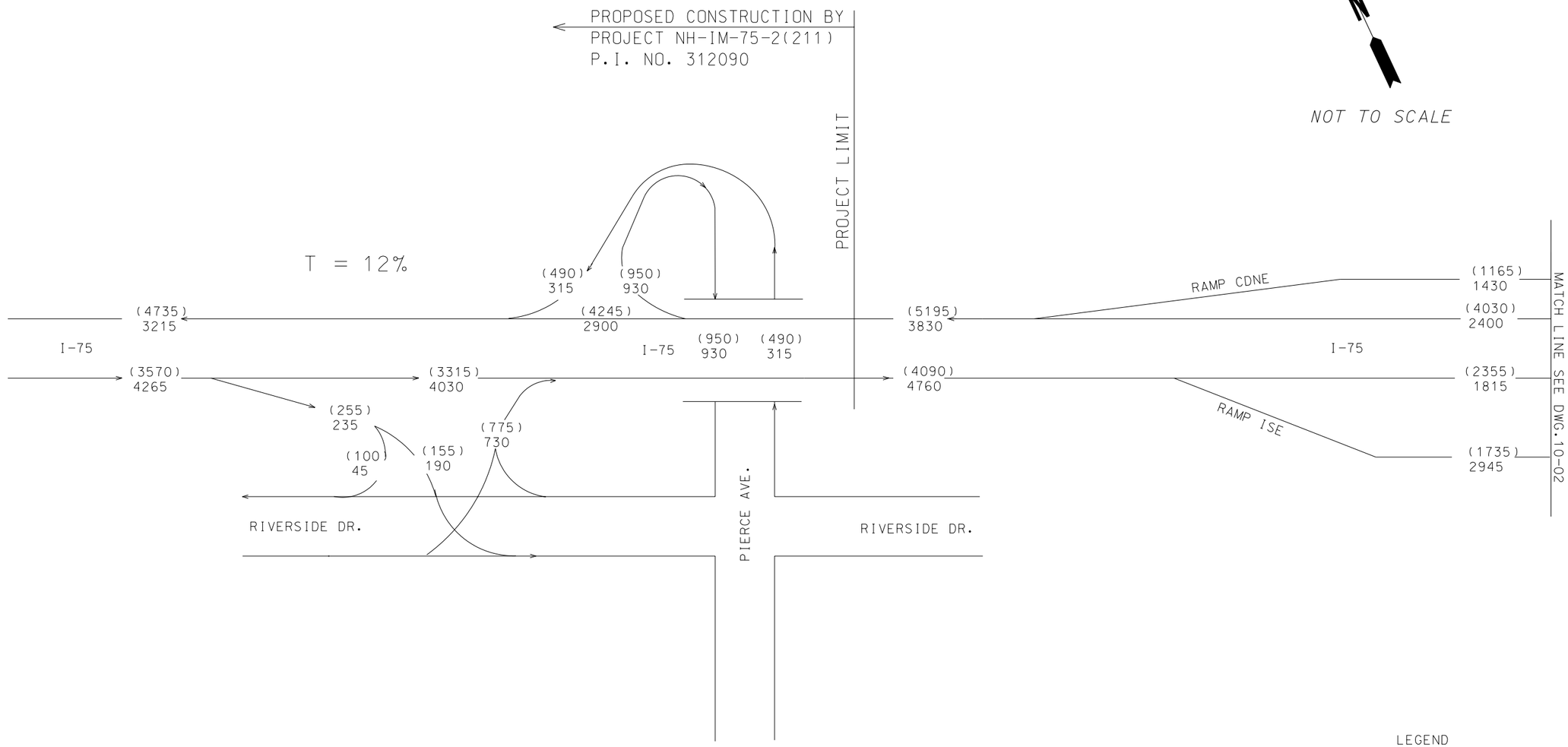
$USER$		$$PENTABLE$$					



MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGNED BY: .
DRAWN BY:
CHECKED BY:
SUPERVISED BY: BRAD HALE P.E.

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC DIAGRAM PLAN

2036 AM (PM) DHV
TRAFFIC FLOW DIAGRAM

DRAWING No. 10-03

GPLN

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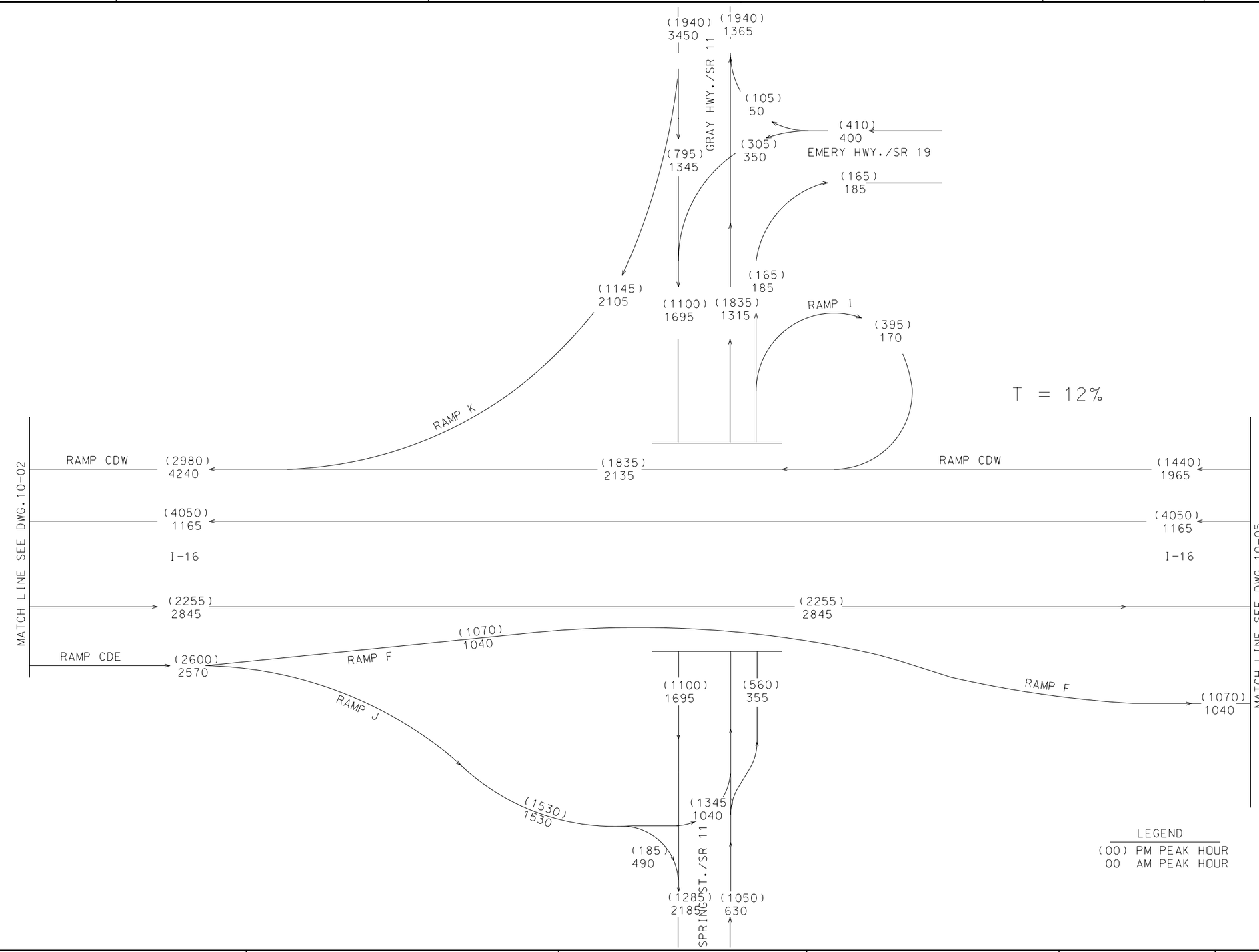

MORELAND-ALTOBELLI ASSOC., INC. (770) 263-5945	REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
DESIGNED BY: .		OFFICE:
DRAWN BY:		TRAFFIC DIAGRAM PLAN
CHECKED BY:		2036 AM (PM) DHV TRAFFIC FLOW DIAGRAM
SUPERVISED BY: BRAD HALE P.E.		DRAWING No. 10-04

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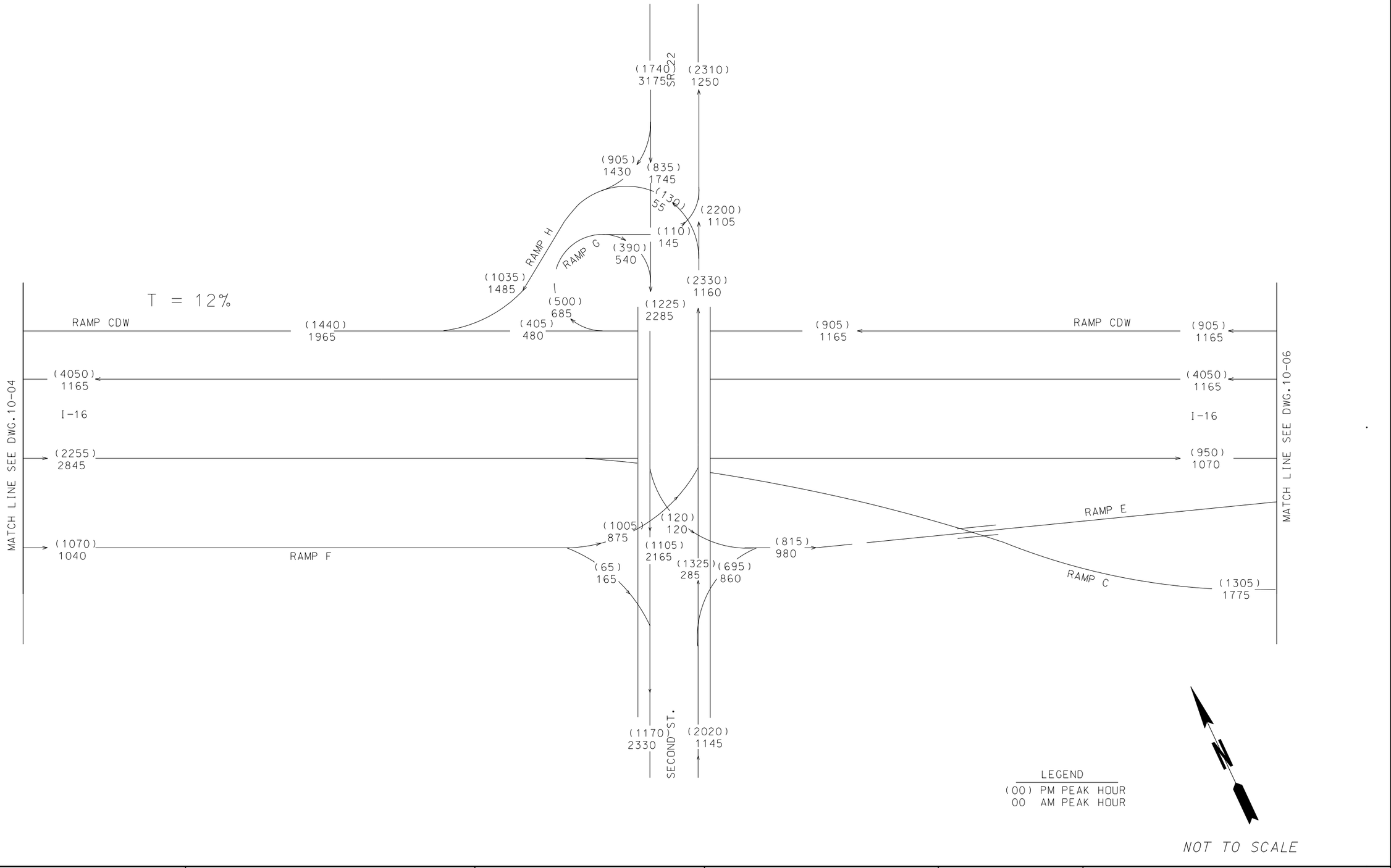

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OFFICE:

TRAFFIC DIAGRAM PLAN

2036 AM (PM) DHV
TRAFFIC FLOW DIAGRAM

DRAWING No. 10-05

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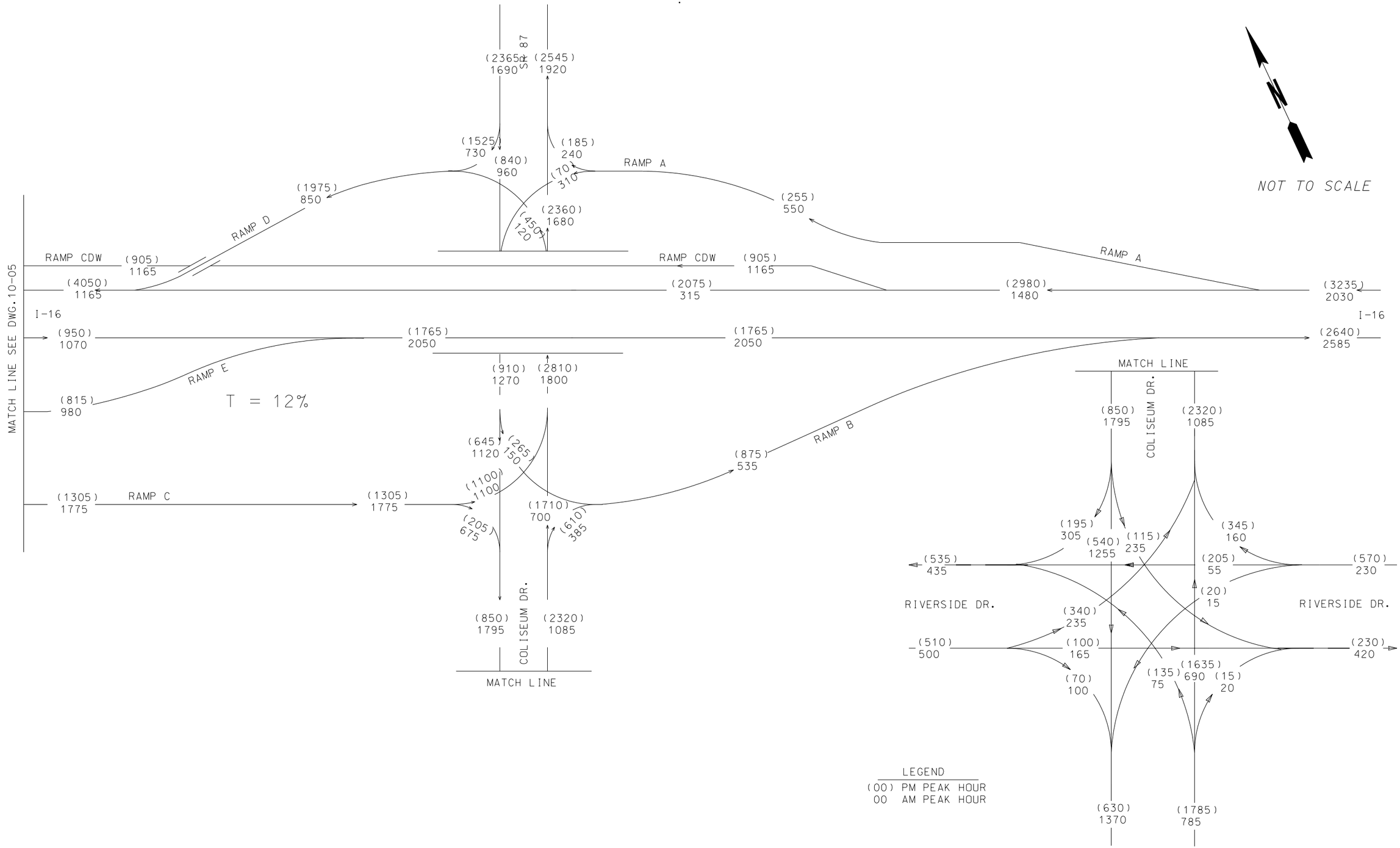

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TRAFFIC DIAGRAM PLAN

2036 AM (PM) DHV
TRAFFIC FLOW DIAGRAM

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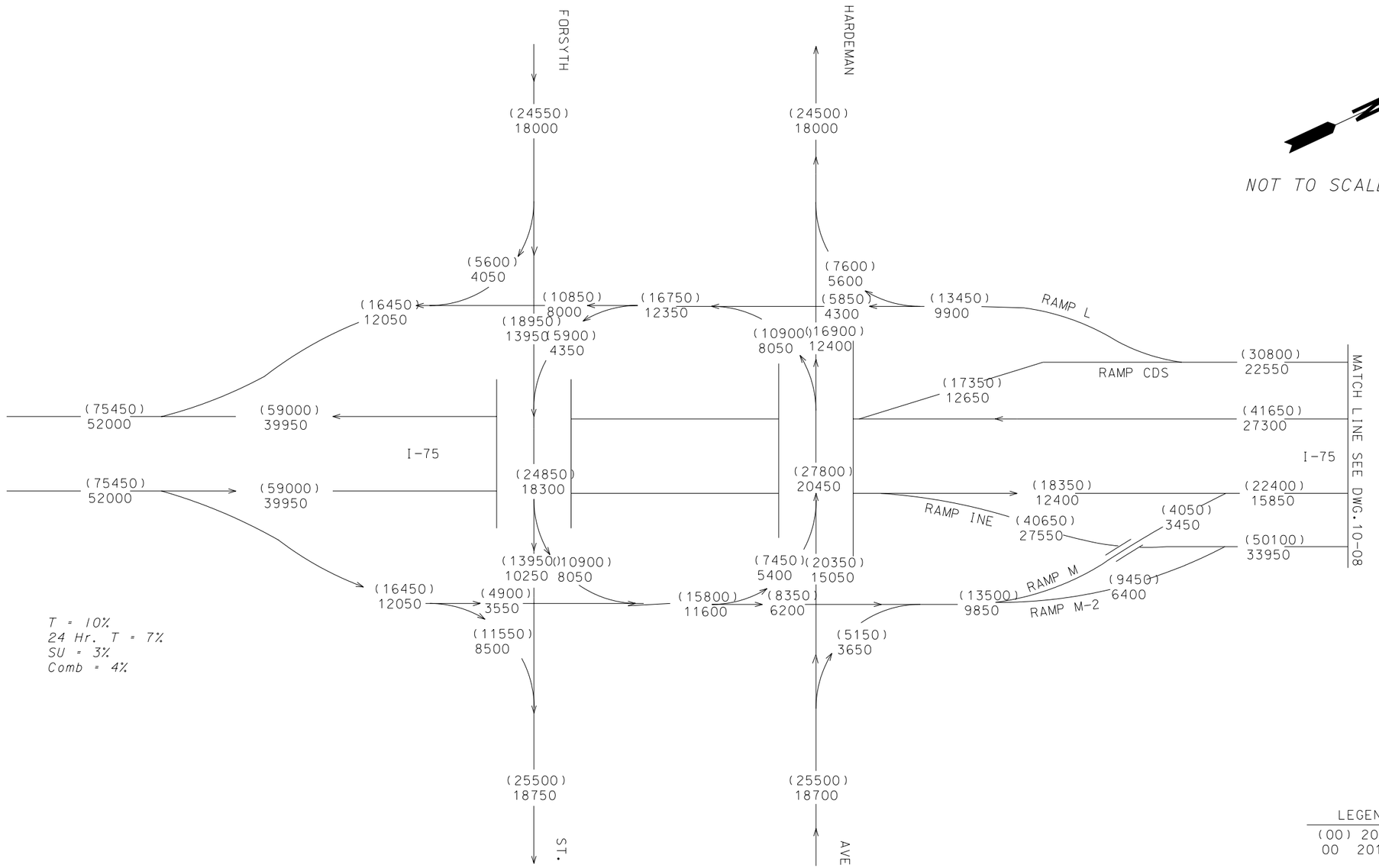

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		SUPERVISED BY: BRAD HALE P.E.		DRAWING No. 10-07

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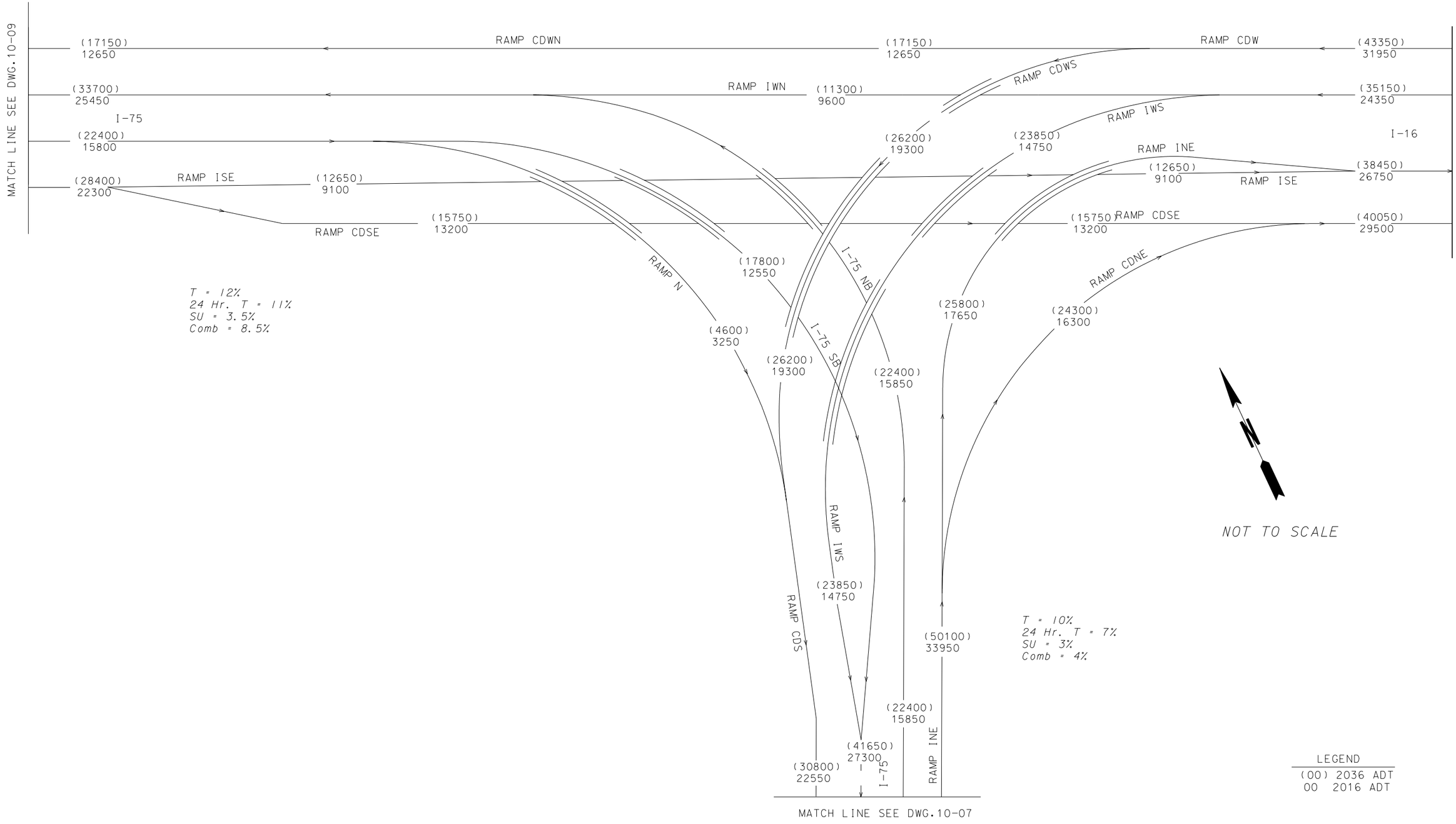

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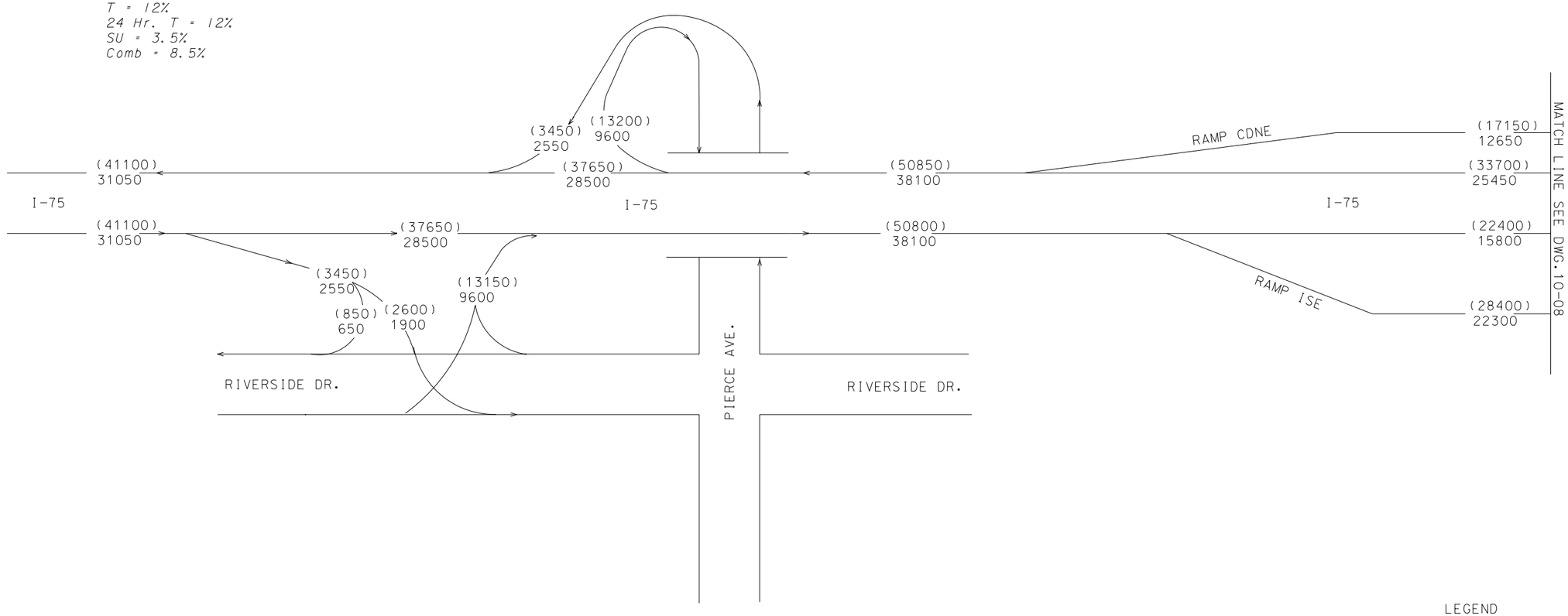

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE:

TRAFFIC DIAGRAM PLAN

2016/(2036) ADT
TRAFFIC FLOW DIAGRAM

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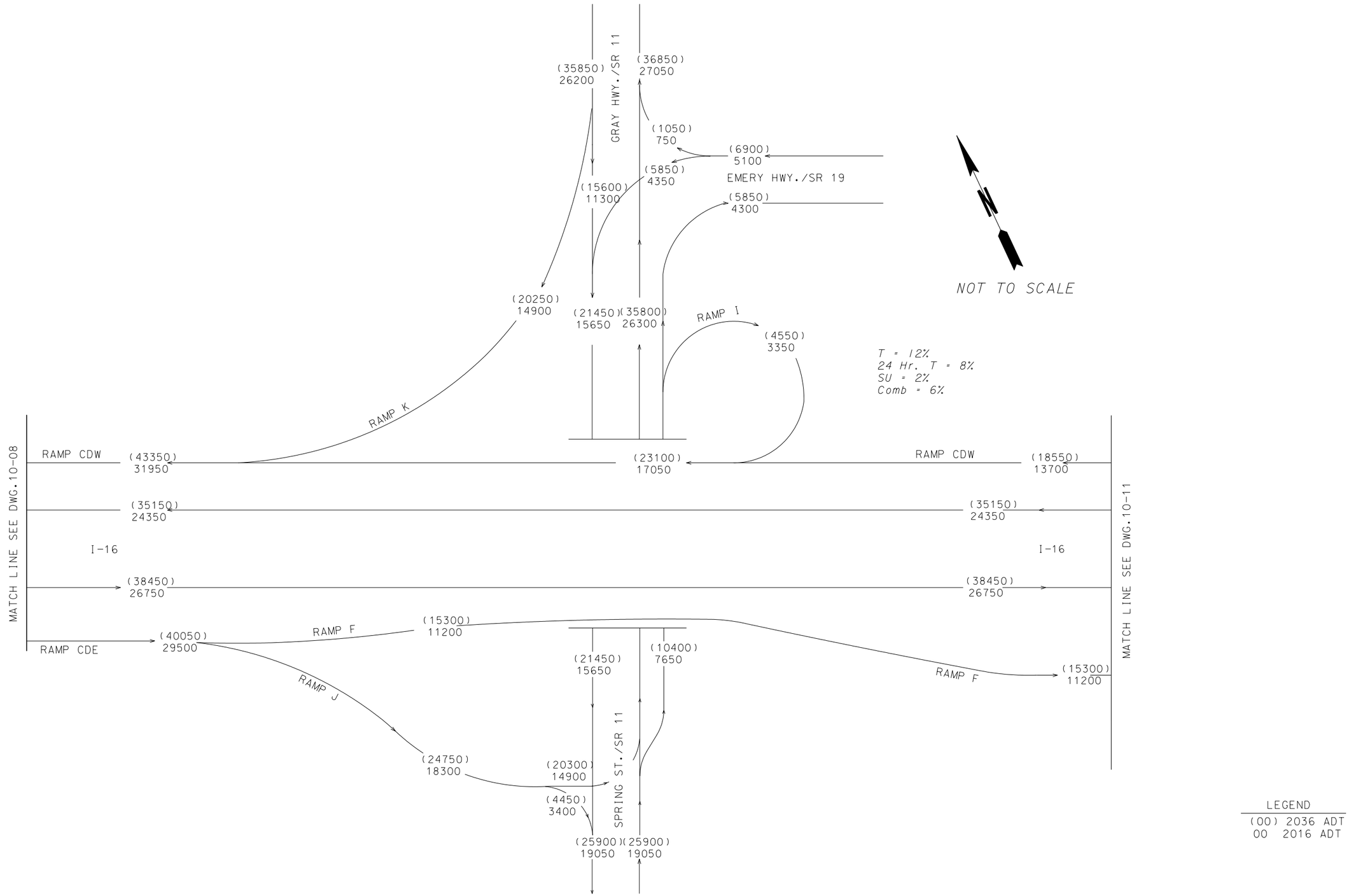

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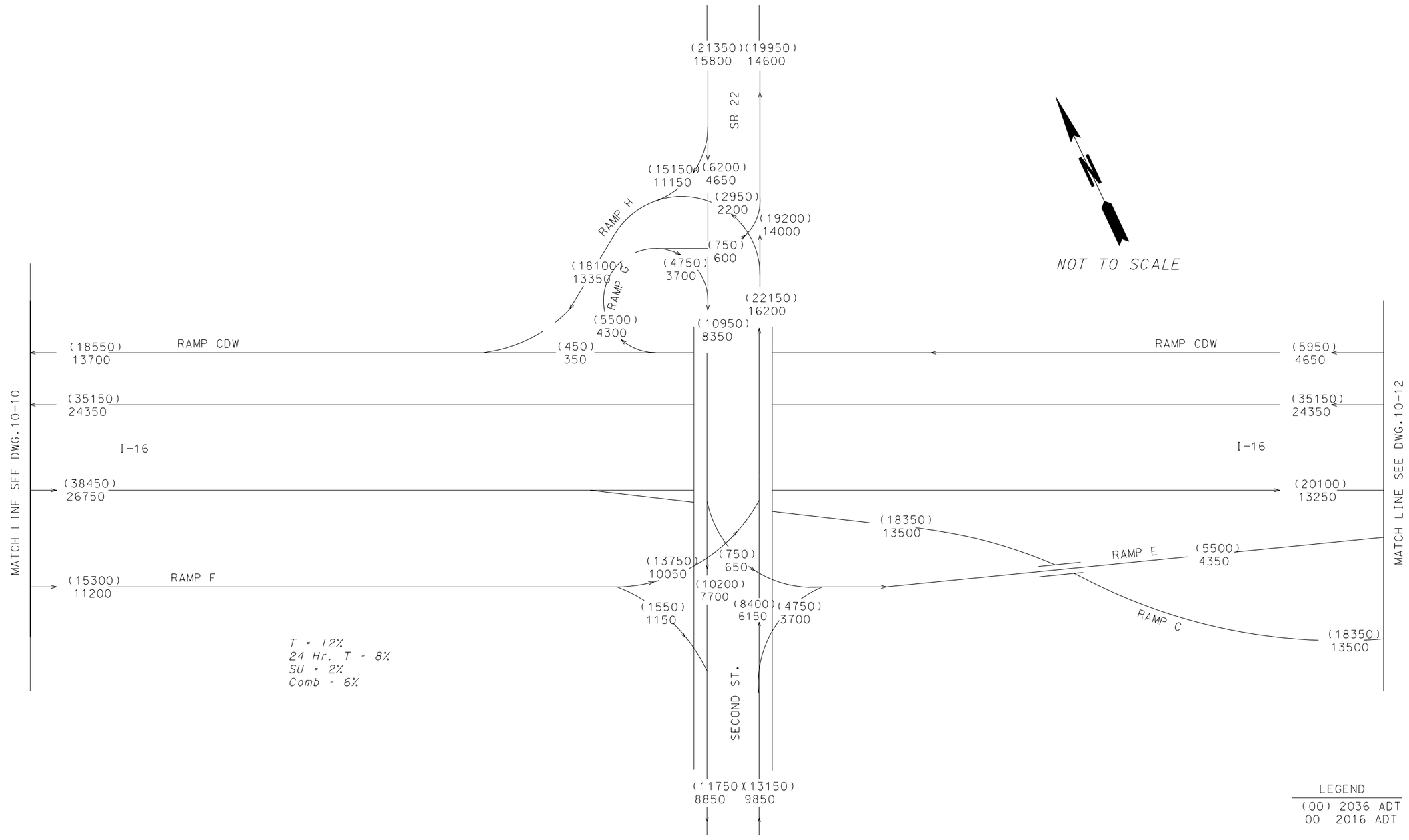

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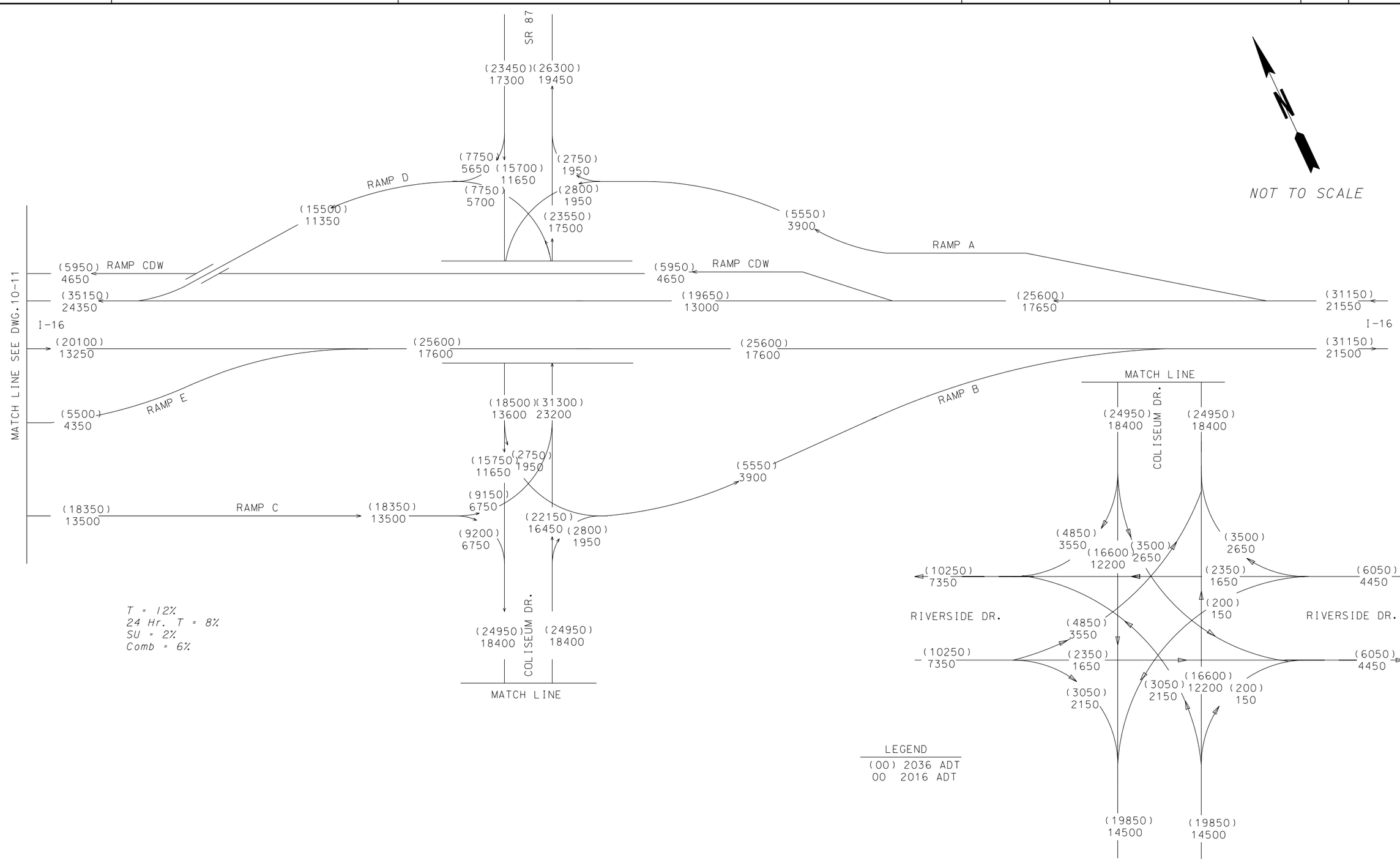

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SUPERVISED BY: BRAD HALE P.E.			DRAWING No. 10-12

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ATTACHMENT #5

TRAFFIC/CAPACITY ANALYSIS (from IMR)

2.0 EXISTING YEAR TRAFFIC CONDITIONS AND ANALYSIS

The existing year (2005) freeway and surface streets operations within the study area roadway network were evaluated in terms of level of service with the latest version of the Highway Capacity Software (HCS). This section includes a discussion of the methodology used to employ the software and the results of this analysis.

Twenty-four-hour Annual Average Daily Traffic (AADT) volumes for all freeway and surface street segments within the study area were obtained from the Georgia Department of Transportation (GDOT) coverage counts, along with the hourly counts, truck percentages, and historical traffic from 1984 to 1999. Moreland Altobelli Associates, Inc. collected new 24-hour recorded machine counts on all mainline, ramps, and cross streets within the project area. Manual peak period turning movement counts were conducted at all ramp heads with cross streets along with selected critical intersections. Regression analysis was conducted with the 24-hour historical counts to develop growth factors for the study area. The growth factors were then compared to the traffic volumes from the Macon Area Transportation Study to develop acceptable growth factors.

Lane configurations for each roadway and intersection were inventoried through field observations. For signalized intersections, all turn and through lanes of significant length (at least 50 feet) were obtained for each approach leg, as well as the current signal phasing and timing data. The 2005 existing condition was developed utilizing the existing traffic volumes, lane configurations, and signal timing data. Existing year (2005) Average Daily Traffic (ADT) and AM/PM peak hour volumes for the study area are provided in Appendix B.

2.1 Capacity Analysis

Capacity analysis was conducted to determine the level of service of the freeway, ramp junctions, weaving sections, and signalized intersections. The levels of service were determined using the Highway Capacity Software (HCS). Level of Service (LOS) is a letter designation used to describe traffic operating conditions, on a declining scale from A to F. Level of service "A" represents free-flow traffic conditions and level of service "F" represents extreme delays with stopped traffic conditions.

The level of service of basic freeway sections, ramp junctions, and signalized intersections were determined using Highway Capacity Software (HCS). HCS was also used to determine the level of service of weaving sections.

2.2 Basic Freeway Sections

Current freeway and surface street operations within the study area roadway network were analyzed using existing volumes and lane configurations. Freeway segment analysis was conducted for one-way freeway segments of I-75 and I-16. The resulting levels of service with the associated direction and number of lanes for each segment are shown below in Table 2.2. All of the existing freeway segments currently operate at acceptable levels of service.

Table 2.2: Year 2005 Existing Freeway Segment LOS Analysis Results

Freeway Segments (From/To)	Direction	No. of Lanes	Level of Service	
			AM Peak	PM Peak
I-75 south of Forsyth Street	NB	3	C	B
I-75 south of Forsyth Street	SB	3	B	C
I-75 from Hardeman Avenue to I-16	NB	4	A	B
I-75 from I-16 to Hardeman Avenue	SB	4	B	B
I-75 from I-16 to Pierce Avenue	NB	2	C	D
I-75 from Pierce Avenue to I-16	SB	2	D	C
I-75 north of Pierce Avenue	NB	2	B	C
I-75 north of Pierce Avenue	SB	2	C	B
I-16 from I-75 to Spring Street	EB	4	B	B
I-16 from Spring Street to I-75	WB	3	C	C
I-16 from Spring Street to Second Street	EB	3	B	A
I-16 from Second Street to Spring Street	WB	2	A	C
I-16 from Second Street to Coliseum Drive	EB	3	B	A
I-16 from Coliseum Drive to Second Street	WB	3	A	B
I-16 east of Coliseum Drive	EB	2	B	B
I-16 east of Coliseum Drive	WB	2	A	B

2.3 Ramps and Ramp Junctions

Ramp junction analysis was performed on the ramp junctions within the study area associated with I-75 and I-16. Results of this analysis are shown in Table 2.3.

As per the *Highway Capacity Manual 2000* for ramps and ramp junction methodology, average volumes and speeds of Lane 1 and Lane 2 of the freeway are used to determine the density of the merge or diverge junction. For the merge junction, density is calculated using lanes 1 and 2 immediately downstream from the merge influence area. Likewise, for the diverge junction, lanes 1 and 2 immediately upstream of the diverge influence area are used to calculate the traffic density.

However, when analyzing major merge and diverge ramp junctions where there are no option lanes in the merge or diverge, the analysis is limited to a check of capacities on the approaching and departing freeway segments. In the case of major merge areas, insufficient capacity in the downstream segment is the deciding factor. In the case of major diverges, operational problems are most often created by insufficient capacity on one or more of the departing legs. For these ramp junctions, the level of service of the approaching or the departing freeway segment is shown in Table 2.3.

Table 2.3: Year 2005 Existing Ramp Junctions LOS Analysis Results		
Ramp Junction	**Level of Service**	
	AM Peak	**PM Peak**
I-75 northbound diverge to Forsyth Street	C	C
Forsyth Street Ramp merge with I-75 southbound	B	C
Hardeman Avenue merge with I-75 northbound	A	B
I-75 southbound diverge to Hardeman Avenue	B	B
I-75 northbound diverge to I-16 eastbound	B	B
I-16 westbound merge with I-75 southbound	B	C
I-16 eastbound diverge to Spring Street	B	B
Spring Street merge with I-16 eastbound	B	B
I-16 eastbound diverge to Coliseum Drive	B	B
Coliseum Drive merge with I-16 eastbound	B	B
I-16 westbound diverge to Coliseum Drive	B	B
I-16 westbound diverge to Second Street	A	C
Coliseum Drive merge with I-16 westbound	A	B
Spring Street southbound merge with I-16 westbound	C	C
Spring Street northbound merge with I-16 westbound	A	D
I-16 westbound diverge to I-75 southbound	F	F
I-16 westbound merge with I-75 northbound	A	F
I-16 eastbound merge with I-75 northbound	C	B
I-75 northbound diverge to Pierce Avenue	C	D
Pierce Avenue merge with I-75 northbound	B	C
I-75 southbound diverge to Pierce Avenue	C	B
Pierce Avenue merge with I-75 southbound	C	B
I-75 southbound diverge to I-16 eastbound	F	C

Currently, the majority of the ramp junctions operate at an acceptable level of service “D” or better during both AM and PM peak hours. However, three of the ramp junctions of the I-16/I-75 interchange currently operate at LOS F during one or both of the peak hours. The I-16 westbound diverge to I-75 southbound has a failing level of service during both the AM and PM peak hours. The I-16 westbound merge with I-75 northbound operates at LOS F during the PM peak hour. The I-75 southbound diverge to I-16 eastbound operates at LOS F during the AM peak hour.

2.4 Weaving Areas

Two existing segments of I-16 met the criteria of a weaving area, as defined in the HCM. Both were identified and analyzed as type "A" weaving areas, or *ramp-weave sections*, consisting of an on-ramp closely followed by an off-ramp where the two are joined by an auxiliary lane. The geometric configuration of a type "A" weave must require one vehicular lane change to successfully complete the weaving maneuver. For a type "A" weave analysis, the length of the weaving segment cannot exceed 2,500 feet.

The segment of I-16 eastbound between the Spring Street on-ramp and the Coliseum Drive off-ramp was determined to operate at LOS B for both the AM and PM peak hours. The segment of I-16 westbound from the Coliseum Drive on-ramp to the Second Street off-ramp operates at LOS B for the AM peak hour and LOS D for the PM peak period. The decrease in the level of service is due to the significant increase in the amount of traffic during the PM peak. The results of this analysis are shown below in Table 2.4.

Table 2.4: Year 2005 Existing Weaving Area LOS Analysis Results

Freeway	Weaving Area Limits (From/To)	Type	Dir.	N*	Length	AM	PM
I-16	Spring Street on-ramp to Coliseum Drive off-ramp	A	EB	3	1325	C	B
	Coliseum Drive on-ramp to Second Street off-ramp	A	WB	3	1200	B	D

* Indicates the number of lanes for that particular segment.

Although the length of the weave exceeds 2,500 feet, the weaving segment on I-75 northbound between the Hardeman Avenue on-ramp and the off-ramp to I-16 eastbound was evaluated. This weave is a type "C" weave where motorists must transition two lanes to continue onto I-75 northbound. The results of the analysis indicated that this weave is operating at a LOS B during both the AM and PM peak hours as shown in Figure 2.4.

Figure 2.4a – Weaving Diagram
I-16 Eastbound between Spring Street and Coliseum Drive

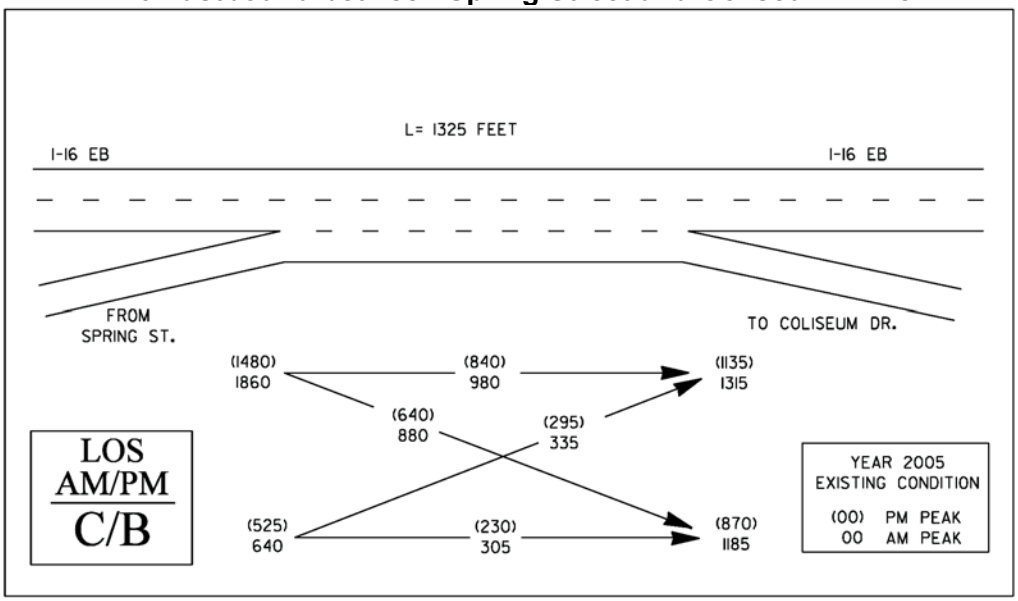


Figure 2.4b – Weaving Diagram
I-16 Westbound between Coliseum Drive and Second Street

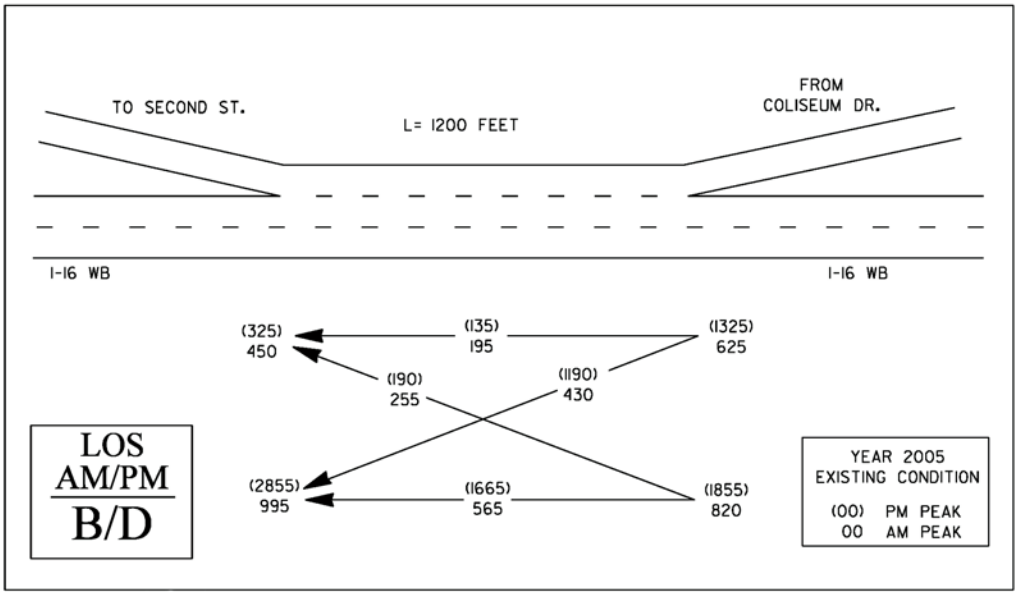
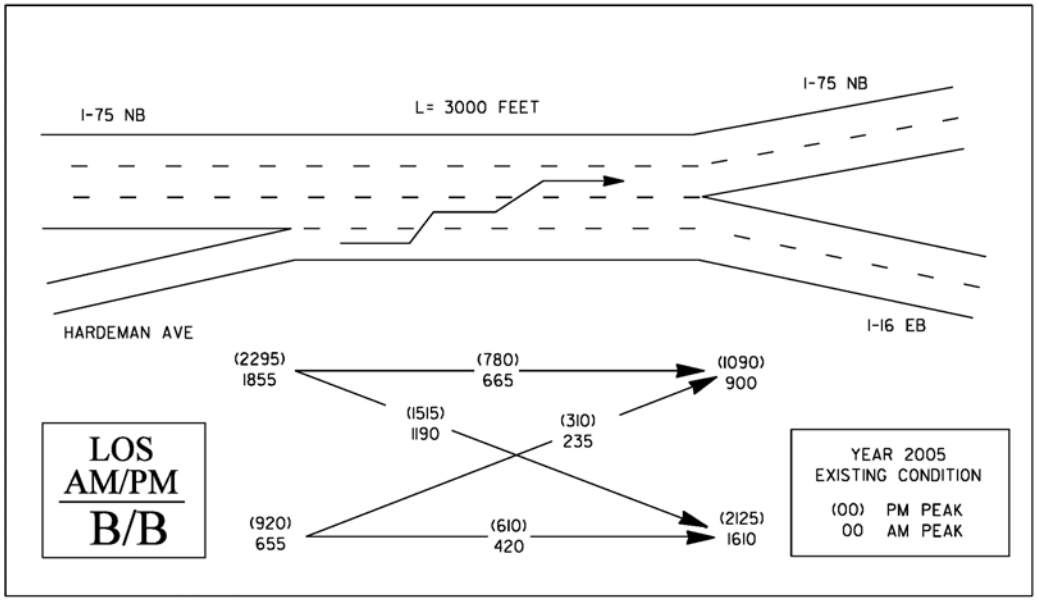


Figure 2.4c – Weaving Diagram
I-75 Northbound between Hardeman Avenue and I-16



2.5 Signalized Intersection Analysis

Intersection capacity analysis was conducted at five existing intersections within the project impact area. The AM and PM peak hour levels of service were determined using HCS analysis. As per the methodology of the *Highway Capacity Manual 2000*, the level of service of a signalized intersection is represented by the average delay values that are listed below:

Level of Service	Average Delay (Seconds/vehicles)
A	0-10
B	>10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

The results of this analysis are shown below in Table 2.5.

Table 2.5: Year 2005 Existing Intersection LOS Analysis Results

Intersection	AM Peak LOS (delay)	PM Peak LOS (delay)
Spring Street @ I-16 westbound on-ramp/ Emery Hwy	F (120.9)	B (19.3)
Spring Street @ I-16 eastbound off-ramp	C (31.4)	D (36.7)
Second Street @ I-16 westbound off-ramp*	D (27.8)	C (20.4)
Coliseum Drive @ I-16 westbound off-ramp*	F (124.5)	F (1178)
Coliseum Drive @ I-16 eastbound off-ramp	D (39.8)	F (197.1)
Coliseum Drive @ Riverside Drive	B (16.8)	C (23.0)

* Unsignalized analysis

For the existing year condition, two out of the six intersections operate below LOS D during the AM and PM peak hours. The intersection of Spring Street and the I-16 westbound on-ramp/Emery Hwy operates at LOS F during the AM peak hour and the intersection of Coliseum Drive and the I-16 eastbound off-ramp operates at LOS F during the PM peak hour.

3.0 FUTURE TRAFFIC CONDITIONS AND ANALYSIS

Future year (2036) freeway and surface street operations within the study area roadway network were analyzed according to the latest version of the Highway Capacity Software and TRAF-CORSIM computer simulation program. Future traffic conditions were analyzed for the 2036 Build and No-Build Condition. The Build condition consists of the Preferred Concept (Alternative 9) and its related transportation improvements. Under the No-Build condition, no action would be taken to construct transportation improvements outlined in this report.

Twenty-four-hour AADT volumes for all freeway and surface street segments within the study area were obtained from the Georgia Department of Transportation (GDOT) coverage count, along with the hourly counts, truck percentages, and historical traffic from 1984 to 1999. Moreland Altobelli Associates, Inc. collected new 24-hour recorded machine counts on all mainlines, ramps, and cross streets within the project area. Manual peak period turning movement counts were conducted at all ramp heads with cross streets along with selected major intersections. Regression analysis was conducted with all of the 24-hour historical counts to develop growth factors for the study area. The growth factors were then compared to the traffic volumes from the Macon Area Transportation Study to develop acceptable growth factors.

Lane configurations for each roadway and intersection were inventoried through field observations. For signalized intersections, all turn and through lanes of a significant length (at least 50 feet) were obtained for each approach leg, as well as the current signal phasing and timing data. The 2036 future year condition was developed utilizing the existing traffic volumes, projected growth factors, lane configurations, and signal timing data. Future year (2036) ADT and AM/PM peak volumes for the study area are provided in Appendix B.

3.1 Capacity Analysis

For the future Build and No-Build conditions, the level of service of basic freeway sections, ramp junctions, weaving sections, and signalized intersections were determined using Highway Capacity Software. However, TRAF-CORSIM was used to supplement the HCS analysis in selected critical freeway segments.

3.2 Basic Freeway Sections

No-Build and Build (Alternative 9) freeway segment analysis was conducted for one-way freeway segments of I-75 and I-16 using projected year 2036 traffic volumes and lane configurations. The level of service results with the associated direction and number of lanes for each segment are shown in Table 3.2.

Table 3.2: Year 2036 Freeway Segment LOS Analysis Results							
Freeway Segments (From/To)	Dir.	No-Build			Build		
		No. of Lanes	AM (LOS)	PM (LOS)	No. of Lanes	AM (LOS)	PM (LOS)
NHIM0-0075-01 (214), P.I. No. 311560 (I-75/Hardeman Ave/Forsyth Street Interchange)*							
I-75 south of Forsyth St	NB	3	E	D	4	C	C
I-75 south of Forsyth St	SB	3	C	F	4	C	D
NHIM0-0016-01 (131), NHIM0-0075-02 (177), NH000-0016-01 (104), NHIM0-0016-01 (092) P.I. Numbers 311005, 311400, 311410, 311000							
I-75 from Hardeman Ave to I-16	NB	4	B	C	2	B	C
I-75 from I-16 to Hardeman Ave	SB	4	C	D	3	A	C
I-16 from I-75 to Spring St	EB	4	C	C	4	B	A
I-16 from Spring St to I-75	WB	3	D	F	3	A	C
I-16 from Spring St to Second St	EB	3	C	B	4	B	A
I-16 from Second St to Spring St	WB	2	C	F	3	A	C
I-16 from Second St to Coliseum Dr	EB	3	C	B	2	A	A
I-16 from Coliseum Dr to Second St	WB	3	C	E	3	A	C
I-16 east of Coliseum Dr	EB	2	C	C	2	C	C
I-16 east of Coliseum Dr	WB	2	B	D	2	B	D
I-75 from I-16 to Pierce Ave	NB	2	E	F	3	B	C
I-75 from Pierce Ave to I-16	SB	2	F	E	3	D	C
NHIM0-0075-02 (211), P.I. No. 312090 (Widening of I-75 from Pierce Ave to Arkwright Rd)							
I-75 north of Pierce Ave	NB	2	D	F	3	B	D
I-75 north of Pierce Ave	SB	2	F	D	3	C	C

* This project was analyzed with the recommended widening of I-75 mainline from Forsyth Street to Mercer University Drive included in the Build condition.

The majority of the freeway segments would operate at capacity or failing levels of service under the 2036 No-Build condition. The only segments that are shown to be operating at LOS D or better for both the AM and PM peak hour are I-75 from Hardeman Avenue to I-16 and I-16 east of Coliseum Drive.

However, the TRAF-CORSIM simulation model of the No-Build condition indicates that only I-16 east of Coliseum Drive would actually operate at an acceptable level of service. The simulation shows that the lack of capacity on I-75 south of Forsyth Street impedes the operations upstream on the interstate, causing a failing level of service on I-75 between I-16 and Hardeman Avenue during the AM peak hour. It is recommended that the I-75 mainline from Forsyth Street to Mercer University Drive be widened to four lanes in each direction. The simulation also shows that the lack of capacity for traffic exiting I-16 eastbound at Spring Street creates back-ups through the I-16/I-75 interchange and along northbound I-75 between Hardeman Avenue and I-16 during the PM peak hour. The Alternative 9 Build condition

drastically improves the overall capacity of the transportation corridor compared with the No-Build condition.

3.3 Ramps and Ramp Junctions

Ramp junction analysis was performed for all ramp junctions under the year 2036 No-Build alternative and the preferred Build alternative. Results of all the ramp junction analysis are shown in Table 3.3.

Table 3.3: Year 2036 Ramp Junction LOS Analysis Results

Ramp Junctions	No-Build		Build	
	AM (LOS)	PM (LOS)	AM (LOS)	PM (LOS)
NHIM0-0075-01 (214), P.I. No. 311560 (I-75/Hardeman Ave/Forsyth Street Interchange)*				
I-75 northbound diverge to Forsyth Street	F	D	C	B
Forsyth Street Ramp merge with I-75 southbound	C	F	C	D
NHIM0-0016-01 (131), NHIM0-0075-02 (177), NH000-0016-01 (104), NHIM0-0016-01 (092) P.I. Numbers 311005, 311400, 311410, 311000				
Hardeman Avenue merge with I-75 northbound	C	C	B	B
I-75 southbound CD diverge to Hardeman Ave			D	B
I-75 southbound diverge to Hardeman Ave	C	D		
I-75 northbound diverge to I-16 eastbound	C	D	B	C
I-75 southbound CD merge with I-75 southbound			A	B
I-16 westbound merge with I-75 southbound	D	E	A	B
I-16 eastbound diverge to Spring Street	C	C	D	B
I-16 eastbound CD diverge to Spring St.			A	B
Spring Street merge with I-16 eastbound	C	C		
I-16 eastbound diverge to Coliseum Drive	C	C	C	B
I-16 westbound CD merge with I-75 southbound			C	B
I-75 northbound CD diverge to I-16 eastbound CD			B	C
Second Street merge with I-16 eastbound			B	A
Coliseum Drive merge with I-16 eastbound	B	B	C	B
I-16 westbound diverge to Coliseum Drive	B	D	B	D
I-16 westbound diverge to westbound CD			B	D
I-16 westbound diverge to Second Street	C	F		
Coliseum Drive merge with I-16 westbound	C	E	A	B
I-16 westbound CD diverge to I-75 northbound CD			B	B
Spring Street southbound merge with I-16 westbound	D	F		
Spring Street northbound merge with I-16 westbound	C	F		
I-16 westbound diverge to I-75 southbound	F	F	A	B
I-16 west-to-north CD merge with I-75 northbound	F	F	B	B
I-16 eastbound merge with I-75 northbound	D	D	B	A
I-16 westbound merge with I-75 northbound	F	F	A	B
NHIM0-0075-02 (211), P.I. No. 312090 (Widening of I-75 from Pierce Ave to Arkwright Rd)				
I-75 southbound diverge to I-16 eastbound	F	F	D	D
I-75 northbound diverge to Pierce Avenue	F	F	B	C
Pierce Avenue merge with I-75 northbound	D	F	B	C
I-75 southbound diverge to Pierce Avenue	F	E	C	C
Pierce Avenue merge with I-75 southbound	F	D	C	C

* This project was analyzed with the recommended widening of I-75 mainline from Forsyth Street to Mercer University Drive included in the Build condition.

The ramp junctions have failing levels of service at many of the same locations as the failing freeway segments, indicating that the future traffic volume cannot be handled under a No-Build alternative. With the exception of the I-16 eastbound diverge to Coliseum Drive, the only ramp junctions to operate at a LOS D or better during both the AM and PM peak hours are along I-75 between Hardeman Avenue and I-16, along I-16 between I-75 and Spring Street, and along I-16 east of Coliseum Drive. These also happen to be the only three freeway segments found to operate at LOS D or better under the HCS analysis. Similar to the freeway segment analysis, all of the ramp junctions under the Build condition (Alternative 9) would operate at LOS D or better.

3.4 Weaving Areas

The same two weaving areas on I-16 that were previously analyzed under the existing conditions were also analyzed under the 2036 No-Build condition. The results are provided below in Table 3.4. For the No-Build condition, both were identified and analyzed as type "A" weaving areas, or *ramp-weave sections*, consisting of an on-ramp closely followed by an off-ramp, where the two are joined by an auxiliary lane. The geometric configuration of a type "A" weave must require one vehicular lane transition to successfully complete the weaving maneuver. For a type "A" weave analysis, the length of the weaving segment cannot exceed 2,500 feet. The two weaving segments for the No-Build condition, shown in Figures 3.4a and 3.4b, are projected to operate at LOS D or worse for both the AM and PM peak hours.

Table 3.4: Year 2036 No-Build Weaving Area LOS Analysis Results

Freeway	Weaving Area Limits (From/To)	Type	Dir.	N*	Length	AM	PM
I-16	Spring Street on-ramp to Coliseum Drive off-ramp	A	EB	3	1325	F	D
	Coliseum Drive on-ramp to Second Street off-ramp	A	WB	3	1200	E	F

* Indicates the number of lanes for that particular segment.

Figure 3.4a – Weaving Diagram
I-16 Eastbound between Spring Street and Coliseum Dr.

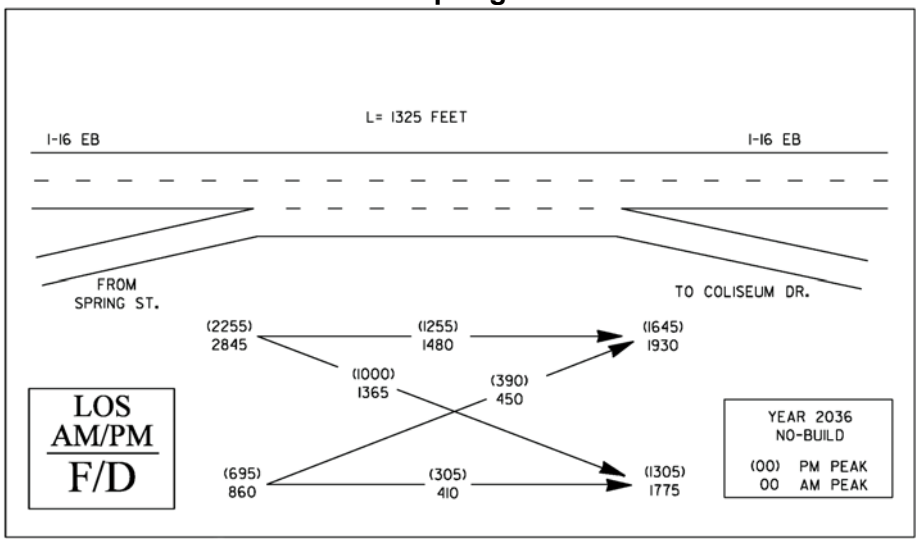
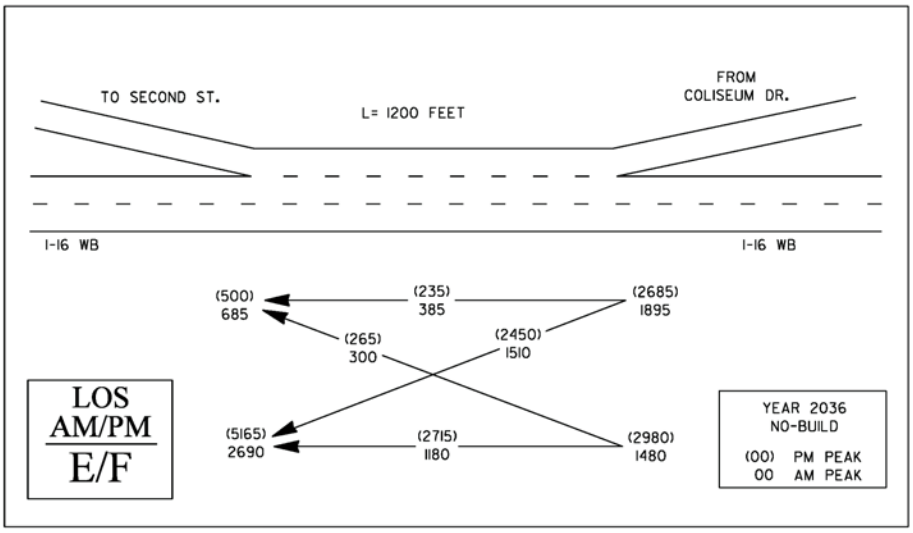
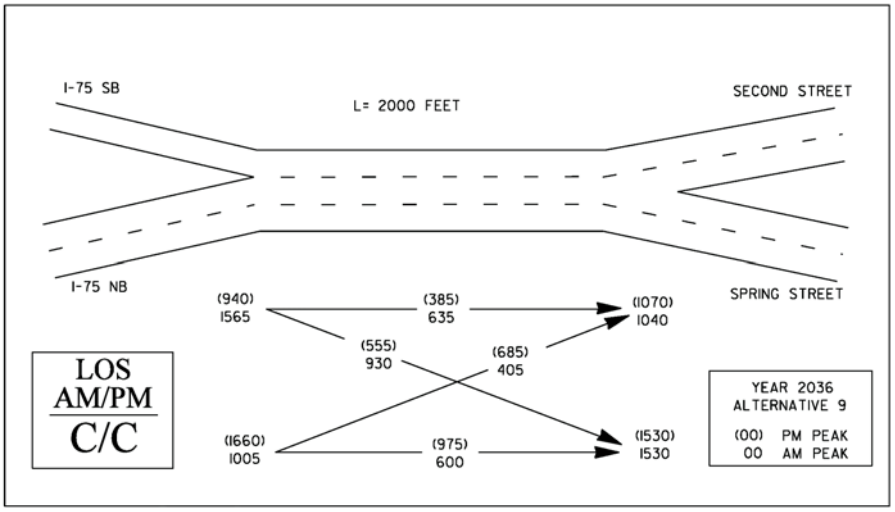


Figure 3.4b – Weaving Diagram
I-16 Westbound between Coliseum Drive and Second Street



For the Build Condition, the change in configuration of the freeway system and the addition of a collector-distributor (CD) road system has eliminated the level and type of weaving traffic that occurs along the I-16 mainline. The proposed CD system allows traffic that would normally utilize I-16 to utilize the CD roads for ramp movements. The type "A" weaves that exist in the No-Build condition no longer exist in the Build (Alternative 9) condition; however, a type "B" weave exists on the I-16 eastbound CD system between the I-16/I-75 interchange and the Second Street off-ramp. This segment is projected to operate at LOS C for both the AM and PM peak periods, as shown in Figure 3.4c.

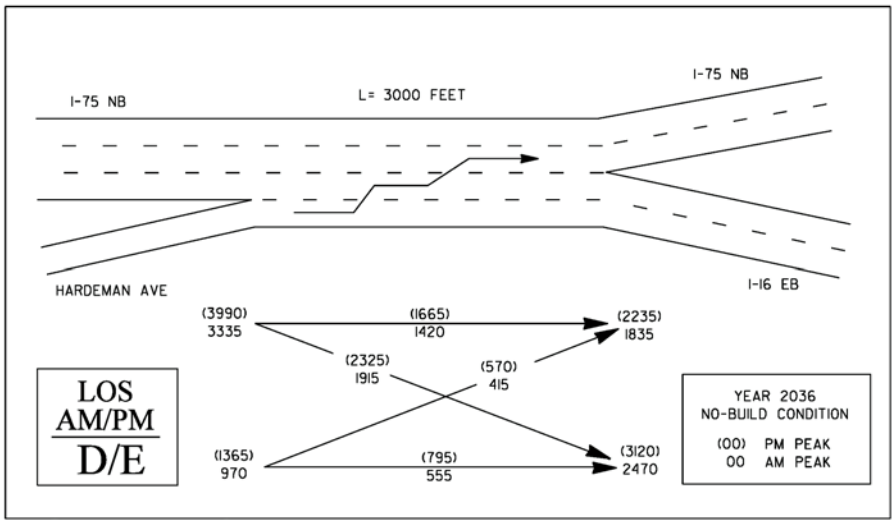
Figure 3.4c – Weaving Diagram
I-16 Eastbound CD between I-75 and Spring Street



Under the No-Build condition, the weaving segment of I-75 northbound between the Hardeman Avenue entrance ramp and I-16 split was evaluated even though the length of the weave exceeds 2,500 feet. This weave is a type "C", where motorists must transition two lanes to continue on I-75 northbound. The

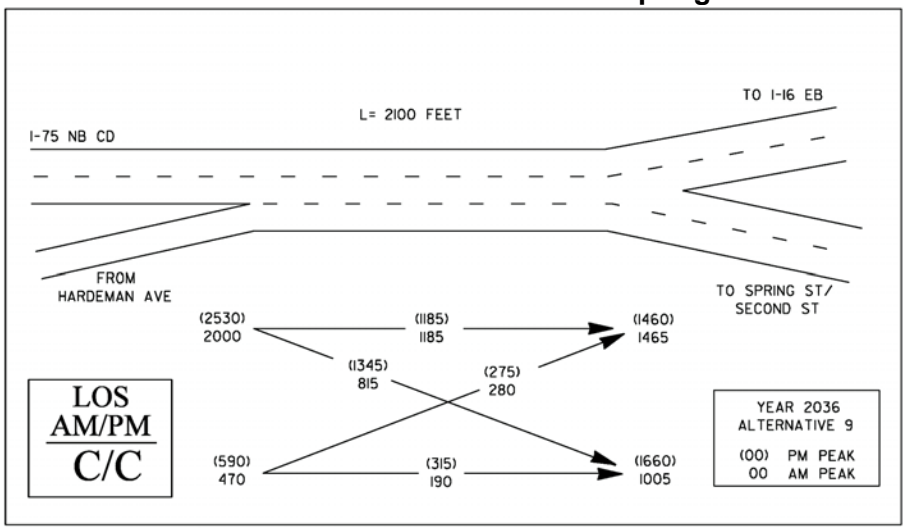
results of the analysis indicate that this weave is operating at a LOS D and LOS E during the AM and PM peak hours, respectively, as shown in Figure 3.4d.

Figure 3.4d – Weaving Diagram
I-75 Northbound between Hardeman Avenue and I-16



Under the Build condition, this weave is eliminated; however, Alternative 9 has a weaving segment on the I-75 northbound CD road between Hardeman Avenue and Spring Street/Second Street. This weaving segment will operate at LOS C during both the AM and PM peak hours as shown in Figure 3.4e.

Figure 3.4e – Weaving Diagram
I-75 Northbound CD between Hardeman Avenue and Spring Street / Second Street



3.5 Signalized Intersection Analysis

Intersection capacity analysis for 2036 No-Build and Build conditions was conducted as described in Section 2.5 using HCS. The results are formulated in Table 3.5.

Table 3.5: Year 2036 Build
Intersection Vehicle Delay (LOS) Analysis Results*

Intersection	No-Build		Build	
	AM LOS (delay)	PM LOS (delay)	AM LOS (delay)	PM LOS (delay)
Spring Street @ I-16 westbound on-ramp/Emery Hwy	F (119.8)	B (19.9)	B (16.8)	B (16.1)
Spring Street @ I-16 eastbound off-ramp	E (79.4)	E (73.8)	C (33.8)	C (34.9)
Second Street @ I-16 eastbound off-ramp			C (23.5)	C (32.1)
Second Street @ I-16 westbound off-ramp **	F (1840)	F (704.4)	B (17.7)	B (15.1)
Coliseum Drive @ I-16 westbound off-ramp **	F (1301)	F (>12000)	C (23.6)	D (38.4)
Coliseum Drive @ I-16 eastbound off-ramp	F (119.4)	F (446.4)	D (42.0)	D (50.3)
Coliseum Drive @ Riverside Drive	B (19.7)	E (61.7)	C (21.8)	D (54.7)

* Values are given in seconds per vehicle (LOS)
** Unsignalized analysis for the No-Build Condition only

The results indicate that the proposed intersections would operate at an acceptable LOS D or better under the year 2036 Build condition. These levels of service indicate an improvement compared to the year 2036 No-Build analysis, in which all but one intersection would operate at LOS E or F during one or both peak hours.

In summary, future traffic conditions with regards to the overall freeway system, CD system, and surface street network operate significantly better under the proposed Build scenario. The full extent of the project impact is measured in terms of the capacity and improved operational level of service on key freeway segments, weaving segments, and ramp junctions.

ATTACHMENT #6

CONCEPT TEAM MEETING MINUTES

Coordination Meeting with FHWA and Norfolk Southern
April 29, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 10:00 AM
Location: Moreland Altobelli - Macon Branch Office

Attendees:

Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mr. Chuck Hasty	GDOT- Urban Design Project Manager
Ms. Marlo Clowers	GDOT- Urban Design
Ms. Mary Mitchell	GDOT- OEL
Mr. David Painter	FHWA
Mr. David Wyatt	Norfolk Southern
Mr. Hugh Hyder	Norfolk Southern
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager
Mr. Tim Heilmeier	HNTB
Mr. Alex Pascual	HNTB

Purpose: In review of the draft Environmental Assessment (EA), the Federal Highway Administration (FHWA) recommended several modifications to the preferred concept alternative. This meeting was intended to be a work session between the Georgia Department of Transportation (GDOT), FHWA, Norfolk Southern, and GDOT's design consultants to review the concept alternatives proposed by FHWA.

Meeting Highlights

To aid in the discussion, Moreland Altobelli provided the following displays:

1) 200 scale plot of preferred concept alternative on aerial photography
2) 400 scale line diagram displays of FHWA recommendations with and without braided ramps (incl. outline of key features, pros & cons, and highlighted problem areas)
3) 400 scale line diagram of preferred concept alternative

The following are the major discussion points from the meeting:

- The alternative concept recommended by FHWA includes only right-hand entrances and exits on I-75 through the I-16/I-75 interchange. FHWA's goal with this recommendation was to maintain continuity along I-75. The project team noted the following problems with this alternative:
    1) Diverging eastbound I-16 on the right side of southbound I-75 would result in a change in driver expectancy due to a counter-intuitive movement for motorists (exiting right to go left).
    2) At the southbound I-75 / eastbound I-16 fork, approximately 60% of the average daily traffic travels on I-16. FHWA's alternative would require the predominant traffic movement to make a right-hand exit at this location.
    3) The majority of cross-state traffic traveling on I-75 uses the I-475 bypass (a shorter route by approximately seven miles) and does not travel on I-75 through the I-16 / I-75 interchange.
    4) Merging westbound I-16 on the right side of southbound I-75 would require additional construction on I-75 and reconstruction of several overpass bridges (Riverside Drive, Walnut Street, The David Lucas Pedestrian Bridge, and Hardeman Ave.). This might also impact the Pleasant Hill Historic District.

  FHWA concurred with the above assessment. The meeting continued without resolution on this issue.

Coordination Meeting with FHWA and Norfolk Southern
April 29, 2003

- FHWA's recommended alternative merges traffic from northbound I-75 and southbound I-75 onto I-16 eastbound prior to exiting traffic destined for downtown Macon on a collector-distributor (C-D) road. This alternative would eliminate two of the bridges currently proposed over the Ocmulgee River. The project team noted the following problems with this alternative:
    1) There is not sufficient distance between the I-16/I-75 interchange and Spring Street to safely provide access to an eastbound C-D road and maintain access to Spring Street (from the eastbound C-D).
    2) Projected traffic volumes indicate that the proposed C-D road would need to be three lanes wide at the diverge from eastbound I-16.

  MA introduced a compromise alternative at this location. The current concept exits traffic to Spring Street from Ramp INE (I-75 NB ramp to I-16 EB) prior to crossing the Ocmulgee River. This exit could be shifted across the river and near the point where Ramps INE and ISE merge to begin eastbound I-16. This would eliminate one of the proposed bridges over the river, but would complicate construction on the Ramp INE Bridge. FHWA agreed that this alternative should be investigated further, and that it may be necessary to extend the eastbound C-D road into the I-16/I-75 interchange (as currently proposed).

- FHWA's recommended alternative shifts all ingress/egress to eastbound I-16 within downtown Macon onto a continuous eastbound C-D road. The goal of this alternative was to improve traffic flow on mainline I-16. The project team offered the following comments concerning this alternative:
    1) Peak hour traffic would overload the proposed C-D road at it's diverge from eastbound I-16. * *The eastbound C-D road would carry 80% of the peak hour traffic while only 20% would continue on eastbound I-16.*
    2) There is not sufficient distance between the interchanges at Spring Street, Second Street, and Coliseum Drive (*1800' and 1700', respectively*) to safely provide ingress/egress from the C-D road without constructing 'braided' service ramps.
    3) A continuous eastbound C-D road with braided service ramps would increase the project footprint and adversely impact the floodplain.
    4) Extending the C-D road past Coliseum Drive would require re-construction of the Central of Georgia Railroad Bridge over I-16. This would also increase impacts to the Ocmulgee National Monument and the Ocmulgee Old Fields Traditional Cultural Property (TCP).

  The project team noted that the preferred concept alternative would alleviate the above problems while maintaining an acceptable level of service (*LOS = C*) on the interstate mainline. As an alternative to FHWA's recommendation, MA suggested a modification to the preferred concept alternative that would improve traffic flow on the mainline. By extending the distance between the entrance ramps onto eastbound I-16 from Spring Street, Second Street, and Coliseum Drive, conflicts on the mainline could be reduced. This would require adding a retaining wall at the end-bent of the Central of GA RR Bridge and increasing the project footprint within the TCP.

- FHWA questioned the project goal of limiting impacts to the TCP and National Monument based on proposed impacts of the Eisenhower Parkway project on the same site. The project team responded that avoidance of the TCP was a goal set forth by the Citizen's Advisory Committee, which included representatives from the Ocmulgee National Monument and the Native American Council in Oklahoma. Also, the NEPA process requires that avoidance alternatives be analyzed as part of the Environmental Assessment (EA). The preferred concept alternative was developed through this process.

- I-16 is on an easement through the Ocmulgee National Monument. The easement agreement limits the construction allowed in this corridor without approval from the National Monument. GDOT noted that this easement agreement has delayed construction of simpler projects such as strain pole installations. FHWA requested that the project team closely review the easement agreement.

- FHWA questioned the necessity of providing access to Second Street from eastbound I-16 and possibly eliminating the need to modify the Second Street Bridge over the Ocmulgee River. The project team responded that providing access to Second Street alleviates traffic queues on the exit ramps to Spring Street and Coliseum Drive. GDOT informed FHWA that the locals have requested full width sidewalks on the bridge. The existing bridge has minimal sidewalks.

Coordination Meeting with FHWA and Norfolk Southern
April 29, 2003

- FHWA questioned whether the profile of I-16 could be raised and the profile of Second Street could be lowered to remove the "roller-coaster" effect. MA responded that this alternative was investigated as part of their Railroad Relocation Study. Although this alternative is geometrically feasible and would improve sight distance on the mainline, it was determined undesirable due to high construction cost and difficult maintenance of traffic during construction. This alternative requires closing Second Street for a period of up to two years.

- Alternatives for reconstruction of the Central of Georgia Railroad Bridge over I-16 were discussed. All agreed that the FHWA alternative would probably require the railroad to be reconstructed on a new, parallel alignment over I-16, the floodplain, and the Ocmulgee River. It was noted that the existing bridge over the river and the adjacent rail bed on the south side of the river are both historic. According to representatives from Norfolk Southern, this line currently carries approximately 20 trains per day. Norfolk Southern agreed to investigate temporary train detour routes (using other existing lines) to allow the bridge over I-16 to be reconstructed in its current location. Norfolk Southern will also determine whether or not this bridge would need to accommodate future double track. Norfolk Southern requested a half-size plot of the project for future reference.

- FHWA recommended that 'ramp metering' be utilized to minimize the number of lanes required on a continuous westbound C-D road (as shown in their recommended alternative). GDOT noted that this would probably result in failing levels of service on the arterial streets and westbound service ramps. This also contradicts the project Need & Purpose which states that the primary purpose of the project is to "*improve the operational efficiency of the following interstate interchanges in Macon: Mainline I-75 @ Mainline I-16, Coliseum Drive @ I-16, Second Avenue @ I-16, and Spring Street @ I-16*". FHWA responded that improving operations on the interstate mainline is more important than improving access to and from downtown Macon.

The discussion was followed by a site visit attended by all of the meeting participants. The primary focus of the site visit was the Central of Georgia Railroad Bridge over I-16. FHWA agreed that it would be desirable to maintain the existing bridge, but wanted the project team to investigate all possible alternatives for reconstruction.

A majority of the on-site conversations could be categorized as "what-if" discussions and attempts to "think out of the box". The focus was on structural solutions or modification alternatives that would not require replacing the railroad bridge or interrupting rail traffic.

One topic explored was how to excavate the existing westbound bridge end roll without compromising the integrity of the existing north end bent. Norfolk-Southern expressed concern over this alternative. There is an existing tieback retaining wall at the south end bent of the railroad bridge over Ramp A (the westbound exit ramp to Coliseum Drive). Given the close proximity (approximately 25') of this wall to end bent adjacent to westbound I-16, Norfolk Southern did not think another tieback retaining wall would be feasible at this location.

HNTB suggested the possibility of using high-tension rods, like Dywidag bars, instead of tieback to punch through the front face of the retaining wall on the other side and provide a wide integral support like a bin wall. In this scheme, the retaining wall can be 'beefed-up' if needed for the anchorage of the bars. FHWA thought this idea was worthy of additional study.

The Second Street Bridge was briefly looked at in the field. FHWA requested plan & profile for all alternatives at Second Street.

GDOT instructed MA to provide FHWA with whatever information they needed to continue their review of the project, and to send copies of the transmittals to the GDOT project manager.

Additional minutes of the meeting from FHWA are attached.

FHWA WORK SESSION
May 29, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 9:00 AM
Location: GDOT – Urban Design Conference Room

Attendees:

Mr. Joseph Palladi	GDOT- Urban Design Engineer
Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Ms. Marlo Clowers	GDOT- Urban Design
Mr. David Painter	FHWA
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager
Mr. M.J. Sheehan	Moreland Altobelli- Consultant Highway Design
Mr. Chris Kingsbury	Moreland Altobelli- Consultant Environmental/Planning
Mr. Karla Poshedly	Moreland Altobelli- Consultant Traffic

Purpose: In review of the draft Environmental Assessment (EA), the Federal Highway Administration (FHWA) recommended several modifications to the preferred concept alternative. This meeting was intended to be a work session between FHWA, the Georgia Department of Transportation (GDOT), and GDOT's design consultant to review these modifications.

Meeting Highlights

To aid in the discussion, Moreland Altobelli brought the following:

- NETSIM model (laptop & projector) – *Not utilized.*
- 200 scale plot of preferred concept alternative on aerial photography
- 400 scale line diagram display of FHWA recommendations (incl. Pros & Cons)
- Alternative profiles for Spring Street, Second Street, Coliseum Drive, and I-16

The primary focus of this meeting was to determine whether to implement, reject, or further study several concept alternatives recently recommended by FHWA. Each alternative was discussed in detail. The following is an outline of the recommended course of action for each alternative as agreed upon by GDOT and FHWA.

1) Reconfigure the I-16 EB split from I-75 SB to exit on the right.

   The location of the I-16 EB / I-75 SB diverge will be shifted North (similar to figure 3-2 in MA's "Analysis of Value Engineering Recommendations") to provide better sight distance & geometry. This diverge will continue to be a directional split with I-75 SB (Ramp ISS) on the right and I-16 EB (Ramp ISE) on the left.

   FHWA recommends pursuing the possibility of re-signing I-75, I-475, and I-16 as follows with a separate project:
   - *Re-designate existing I-475 as I-75.*
   - *Re-designate existing I-75 from the current I-475 junction eastward to the I-16/ I-75 interchange as I-16.*
   - *Re-designate existing I-75 from the I-16/I-75 interchange southward to the current I-475 junction as I-475.*

   Under this scenario, the I-75 mainline would bypass downtown Macon, and the existing I-16/I-75 interchange would become the I-16/I-475 interchange. This will be taken into consideration, but most likely will not be included in the proposed project.

2) Increase the number of lanes on Ramps ISS and INN (I-75 mainline through the interchange) from two lanes to three lanes.

Given the traffic distribution through the interchange and the possibility of re-signing the interstates as described above, it was agreed that continuity should not be an issue for the I-75 mainline ramps through the interchange. Ramps ISS and INN will each retain their current lane configurations (two lanes each).

3) Eliminate I-16 Collector-Distributor (C-D) ramps and bridges within the I-16/I-75 interchange (begin C-D's midway between the I-16/I-75 interchange and Spring Street).

After a lengthy discussion, it was agreed that the following 'compromise alternative' (in lieu of FHWA's recommendation above) would be investigated further:

- *Shift the beginning of ramp CDNE to the East side of the Ocmulgee River, eliminating one of the proposed bridges. This will require shifting the alignment of Ramp CDSE to the South. Ramps CDSE and CDNE will merge to form a ramp that only services Spring Street (similar to the current design).*
- *Eliminate the westbound ramps from Spring Street to I-16*
- *Connect the westbound ramp from Second Street with a continuous westbound C-D.*
- *Connect the westbound C-D midway between the I-16/I-75 interchange and Spring Street (i.e. eliminate Ramps CDWS and CDWN).*

The project team noted that this alternative would have an undesirable impact to traffic operations on the local streets in downtown Macon. It is likely that improvements (widening and intersection modifications) would be necessary on Second Street between Gray Highway and I-16.

MA will provide the following prior to further analysis of this alternative:

- *Line diagrams depicting the above alternative*
- *Revised traffic analysis that includes the above modifications, and four additional intersections (Second Street @ Emery Highway, Second Street @ Gray Highway, Spring Street @ Baconsfield Drive, and Spring Street @ Nottingham Drive / North Avenue). MA will request traffic volumes from the City of Macon before doing manual counts. The updated traffic analysis will include HCS and TRAF-CORSIM runs.*
- *Alternative layout (plan only) for Ramps CDSE and CDNE.*

4) Provide a continuous eastbound C-D along I-16 instead of three consecutive entrance ramps.

As described above, the eastbound exit ramps to Spring Street will remain separated from the C-D road servicing Second Street and Coliseum Drive. After a lengthy discussion, it was agreed that the following 'compromise alternative' (in lieu of FHWA's recommendation above) would be investigated further:

- *Connect the eastbound entrance ramp from Spring Street with the eastbound entrance ramp from Second Street to form a single lane, eastbound collector road.*
- *Connect the eastbound collector road to eastbound I-16 immediately past the Central of Georgia Railroad overpass.*
- *Construct the eastbound entrance ramp from Coliseum Drive through the end-roll of the Central of Georgia Railroad Bridge over I-16. This would require a tie-back retaining wall under the railroad bridge.*
- *Shift the alignments for the westbound distributor road and exit ramps to Second Street and Coliseum Drive closer to I-16. This will require the Second Street Bridge to be reconstructed and several transmission towers to be relocated.*

MA will analyze traffic for this alternative before further discussion/review.

5) Extend the eastbound C-D past the Central of Georgia Railroad and into the Ocmulgee National Monument / TCP.

As described above, a modification to the current configuration will be analyzed in lieu of a continuous C-D road as recommended by FHWA.

6) Extend the westbound C-D past the Central of Georgia Railroad and into the Ocmulgee National Monument / TCP.

   This alternative would require excavating the existing end-roll adjacent to westbound I-16 and constructing a wall that may conflict with an existing tie-back wall. Norfolk-Southern recently submitted a letter to GDOT noting concerns with this alternative and requesting that the entire bridge be replaced if this alternative were pursued. FHWA requested a copy of this letter.

7) Provide a continuous westbound C-D along I-16 instead of two consecutive entrance ramps.

   MA will analyze a revised westbound C-D system (as outlined in section 3 above) using TRAF-CORSIM.

8) Provide ramp metering for the service ramps onto the westbound C-D road.

   GDOT objected to the use of ramp metering and noted that reduced accessibility and poor (or failing) traffic operations on the local streets contradict the current Need & Purpose. FHWA noted that poor level of service on the local streets would be acceptable as long as traffic operations on the interstate mainline were improved.

   MA will include geometric ramp metering (providing single lane entrance ramps regardless of traffic volumes) in their revised TRAF-CORSIM model before further discussion/review of this alternative.

9) Elevate I-16 (from Spring Street to Coliseum Drive) and lower Second Street.

   After reviewing alternative profiles for Second Street and I-16, it was agreed that this alternative should not be implemented.

At the close of the meeting, Mrs. Angela Alexander asked FHWA to clarify what would be required by a "systems level analysis of roadway traffic operations due to the Ocmulgee Heritage Trail". Mr. David Painter responded that the environmental document should quantify impacts/effects to the trail due to the proposed roadway improvements and that no impact on the operations of the interstate would result from an analysis of the trail.

FHWA WORK SESSION
September 3, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 2:00 PM
Location: GDOT – Urban Design Conference Room

Attendees:

Mr. James Ben Buchan	GDOT- Urban Design Engineer
Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mr. Chuck Hasty	GDOT- Urban Design Project Manager
Ms. Marlo Clowers	GDOT- Urban Design
Mr. David Painter	FHWA
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager

Purpose: In review of the draft Environmental Assessment (EA), the Federal Highway Administration (FHWA) recommended several modifications to the preferred concept alternative. This was the fourth work session held with FHWA since February 2003. Previous work sessions yielded a compromise alternative that FHWA recommended be studied further. FHWA requested that this meeting be held in order to re-visit some of the issues discussed at earlier meetings.

Meeting Highlights

To aid in the discussion, Moreland Altobelli brought the following:

- 200 scale plot of preferred concept alternative on aerial photography
- Line diagram display of FHWA recommendations (incl. Pros & Cons)

The following is an outline of the issues raised by FHWA during the discussion:

1) FHWA believes the Eisenhower Parkway Extension (EPE) and the I-16/I-75 Interchange Improvements do not have independent utility and that the Need & Purpose for both projects should be revisited. They (FHWA) may recommend a new overpass approximately 500' east of Coliseum Drive as the preferred alternative for EPE. FHWA believes this alternative would impact traffic on the interchanges within the I-16/I-75 project.
2) FHWA does not accept Norfolk Southern's request to avoid modifications to the existing railroad bridge over I-16. They believe the collector-distributor (C-D) roads could be extended through the existing end-rolls of this bridge without interruption to rail service.
3) FHWA would still prefer to raise I-16 and lower Second Street (i.e. – reconstruction Second Street underneath I-16).
4) FHWA wants to re-sign the interstates through Macon/Bibb County before agreeing to allow a left-hand exit for I-16 from SB I-75.
5) FHWA would prefer continuous C-D roads along I-16 to the current design.

GDOT responded as follows:

1) GDOT believes the EPE and I-16/I-75 have independent utility. GDOT requested that FHWA make a formal request if they want to revisit the planning stages of these projects. There is no need to study specific design issues on the I-16/I-75 project until this is resolved.
2) GDOT noted that issues with Norfolk Southern could be resolved during the design process. They also noted that the current design does not impact the overpass in question.

3) GDOT did not wish to discuss the proposal to raise I-16 and lower Second Street given FHWA's concern with the overall concept.
4) GDOT recommended that FHWA pursue resigning the interstates as an independent project, and to let the interchange improvements proceed as planned.
5) GDOT did not wish to discuss alternatives for the I-16 C-D roads given FHWA's concern with the overall concept.

At the close of the meeting, GDOT noted that this project was the product of an extensive process that included coordination with various agencies, input from stakeholders, multiple alternatives developed by GDOT, HNTB, and Moreland Altobelli, and a value engineering review. The resulting preferred concept alternative incorporates the input from these sources while still meeting all necessary design criteria. Mr. Painter agreed to discuss GDOT's requests with his superiors at FHWA, and to check on the status of FHWA's review of the Eisenhower Parkway EIS.

FHWA WORK SESSION
November 4, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 10:00 AM
Location: GDOT – Urban Design Conference Room

Attendees:

Mr. Tom Turner	GDOT- Director of Preconstruction
Mr. James Ben Buchan	GDOT- Urban Design Engineer
Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mr. Chuck Hasty	GDOT- Urban Design Project Manager
Ms. Marlo Clowers	GDOT- Urban Design
Mr. David Painter	FHWA
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager

Purpose: In review of the draft Environmental Assessment (EA), the Federal Highway Administration (FHWA) recommended several modifications to the preferred concept alternative. This was the fifth work session held with FHWA since February 2003. The purpose of this meeting was to discuss several outstanding issues with FHWA.

Meeting Highlights

ISSUE #1: **Independent utility between I-16/I-75 Interchange Modification Projects and the Eisenhower Parkway Extension (EPE) project.**

- *FHWA and GDOT both agreed that these projects have independent utility.*
- *FHWA would still like to see a comprehensive traffic model that includes the preferred alternative for both projects.*
- *FHWA requested that the IMR for I-16/I-75 include a write-up about the EPE's affect (or lack of) on this project.*
- *Mr. Turner noted that GDOT's Planning Office could review the traffic models for both projects and develop an overall model if necessary.*

ISSUE #2: Continuous C-D roads vs. C-D roads with multiple points of access (current design).

- *FHWA's primary concerns are the six proposed bridges over the Ocmulgee River, and the three consecutive eastbound entrance ramps on I-16.*
- *FHWA's initial recommendation included eliminating the C-D ramps and bridges within the I-16/I-75 interchange, connecting all I-16 service ramps to the C-D roads, and extending the C-D roads past the Central of Georgia Railroad overpass (and into the National Monument / TCP).*
- *A compromise alternative was discussed during the May 29th meeting with FHWA. Line diagrams depicting this alternative were submitted to FHWA on June 9, 2003 (along with traffic data and other requested information). Mr. Painter noted that this alternative has not been reviewed. FHWA's initial recommendation above still stands.*
- *Mr. Turner noted that the primary concern with FHWA's recommendation is the weave created on I-16 (westbound and eastbound) between the I-16/I-75 interchange and Spring Street. He agreed that six bridges over the river is undesirable, but all other alternatives reviewed so far have unacceptable impacts to traffic operations.*

- *GDOT and MA's other concerns include poor traffic operations on the local street network, impacts to the Riverside Drive Bridge over I-75, impacts to the floodplain, impacts to the Central of GA RR Bridge over I-16, and impacts to the National Monument & TCP.*
- *MA has reviewed the option for extending a two-lane eastbound C-D through the end-span of the Central of GA RR Bridge and determined there is insufficient lateral distance. Mr. Painter suggested eliminating the entrance ramp from Coliseum Drive and extending a single-lane C-D road under the RR Bridge. GDOT noted this would be undesirable and contradictory to the project need & purpose.*
- *Mr. Painter agreed to further review the compromise alternative submitted in June.*

ISSUE #3: Raise I-16 approx. 30 feet and lower Second Street.

- *FHWA previously suggested this alternative to improve the vertical geometry on I-16.*
- *GDOT maintains that this alternative is unacceptable due to high construction cost, difficult maintenance of traffic during construction, and minimal improvement to the current design.*
- *No additional work is necessary for this alternative, but the issue is still unresolved.*

ISSUE #4: Change the interstate designations through Macon (change I-475 to I-75, etc.)

- *FHWA will need to pursue this issue independently from the I-16/I-75 interchange project.*

Mr. Painter agreed to discuss each of the issues above with his superiors at FHWA and to thoroughly review the compromise alternative and traffic data previously submitted to his office. Mr. Turner requested that a follow-up meeting be held in 2 weeks (before Thanksgiving).

I-16/I-75 Coordination Meeting

March 17, 2004
Office of Planning Conference Room

Meeting Attendees

Chuck Hasty	GDOT - Urban Design
Marlo Clowers	GDOT - Urban Design
Mark Bartlett	FHWA
Gus Shanine	FHWA
Brad Hale	MAAI
Radney Simpson	GDOT - Planning
Joe Palladi	GDOT - Planning
Dave Painter	FHWA
Cora Cook	GDOT - Planning
Walter Boyd	FHWA
Angela Alexander	GDOT - Chief Engineer's Office
Ben Buchan	GDOT - Urban Design

Mr. Bartlett provided an Agenda for the Meeting. *Discussion:* Some time ago, GDOT and FHWA had a meeting to discuss the concept for the project. Mr. Painter was to provide a letter to GDOT stating FHWA's issues with the current layout. Prior to sending the letter, Mr. Bartlett reviewed the current concept and began to develop an alternative concept. Mr. Bartlett stated that GDOT and FHWA are not that far apart. There are four areas that need additional study/work (the four areas are outlined as 1 through 4 on the Agenda). GDOT has done a good job of separating System-to-System Level Interchanges from System-to-Service Level Interchanges; however, an increase in the distance from the access points needs to be increased.

Agenda Item No. 1

Combine Entrance Ramps Westbound I-16 CD - remove entry onto mainline from Second Street, divert this entry to the CD and provide a separate braided exit from I-16 to Second Street.

a. This feature ties Coliseum Drive to Second Street and Spring Street via the CD System.

b. It removes the weave between Second Street Exit Ramp and the Coliseum Drive Entrance Ramp

Combined DHV from Coliseum Drive, Second Street, and Spring Street result in a volume on the CD of 4,185 vehicles prior to the I-75 NB and I-75 SB split.

Mr. Hale reported this alternative was analyzed in past versions and the biggest problem realized would be to work the three lanes needed for the CD back into I-75 north of the Hardeman/Forsyth Interchange.

Mr. Palladi stated that issues concerning the 100-year Flood Plain Elevation (I-16 shoulders currently at the 100-year Flood Plain Elevation) and braiding ramps to facilitate Item No. 1 would occur if depressed roadway work is below the 100-year Flood Plain Elevation.

Mr. Bartlett stated the layout was a concept not a final design. Issues concerning the 100-year Flood Plain Elevation would need to be addressed in the final design.

Agenda Item No. 2

Flip I-75 SB to I-16 EB Exit Ramp onto the right side of I-75.

- *a. This feature maintains I-75 through lanes and requires minimum lane shifting for through traffic. It makes I-75 through lanes consistent with driver expectancy*
- *b. It doubles the weaving distance between the I-16/75 exit point and the CD exit point.*
- *c. It increases Overhead Sign spacing*

Mr. Bartlett - Evaluate I-75 with braiding to provide it as the through movement and I-16 exits to the right. Allows downtown Macon traffic (to Spring Street, Second Street, and Coliseum Drive) to exit on the right prior to the I-16 EB exit on the right (the System-to-System Level Interchange).

I-75	I-16	Spring St., Second St., Coliseum Dr.
Left lane	Middle lane	Right lane

In the westbound direction, Agenda Item No. 1 combines Entrance Ramps and distributes Exit Ramps.
In the eastbound direction, Agenda Item No. 2 distributes Entrance Ramps and combines Exit Ramps.

Agenda Item No. 3

Combine Exit Ramps to Spring Street, Second Street, and Coliseum Drive from I-75 NB and SB - accomplished via a CD Network

- *a. NB exit is near Walnut Street Overpass Bridge. I-16/75 diverge is pushed further north to increase spacing between successive points of turbulence which are Forsyth/Hardeman Entrance Ramp, Spring Street, Second Street, and Coliseum Drive Exit Ramp and I-16/75 diverge.*
  - *i. This eliminates signage issues related to the Spring Street Exit Ramp.*
  - *ii. This reduces weaving along the length of I-75.*
- *b. Ultimately, the SB exit is near Pierce Avenue. This eliminates the weave for I-75 traffic exiting to I-16 and then to Spring Street, Second Street, and Coliseum Drive.*
  - *i. This eliminates signage issues related to the Spring Street Exit Ramp.*
- *c. This feature ties the off ramps of Spring Street, Second Street, and Coliseum Drive together.*

Mr. Bartlett - For I-75 NB, exit Spring Street, Second Street, and Coliseum Drive on the right, near the Walnut Street Overpass Bridge, prior to the System-to-System Level Interchange with I-16 EB exit to the right. Add an auxiliary lane from the Hardeman/Forsyth Interchange to facilitate the downtown Macon traffic merge (SB) and diverge (NB) movements.

Agenda Item No. 4

Move I-16 WB Entrance Ramp to I-75 SB on the right-side of the mainline roadway.

- *a. This feature allows for a common bridge structure, but separated traffic streams with I-16 WB CD*
- *b. It ties into I-75 SB at Walnut Street*
- *c. The I-16 WB CD ties into an auxiliary lane just north of the Forsyth/Hardeman Interchange, but ultimately extends south of the Forsyth/Hardeman Interchange.*

Mr. Buchan - This is where we stand. We will look at the proposal to determine if additional impacts to Resource Agencies will result (identification of impacts to Resource Agencies that are not already identified as impacting). We can not afford to create additional, unidentified impacts with FHWA's currently proposed concept modifications.

Mr. Hale - Is there a way to develop an Interim project in advance of the Interchange Reconstruction project?

Mr. Bartlett - We would consider the possibility of staging the projects to advance construction.

Mr. Hasty - The current Fiscal Year Programming Dates for the four projects directly associated with the I-16/75 Interchange Reconstruction:

P.I. No.	RW FY	CST FY
311000-	2005	2007
311005-	2005	2007
311400-	2006	2008
311410-	2006	2007

Mr. Buchan - I guess the problem I have with the current concept is that there is not a continuous lane on I-75, in either direction, through the Macon Area.

Mr. Buchan - If problems with Resource Agencies become apparent with FHWA's current concept alternative, would FHWA consider the currently proposed concept as a prudent and feasible alternative?

Mr. Bartlett - FHWA does not consider the current concept feasible with respect to the precedent set by recently-approved IJR/IMRs.

Mr. Bartlett - If GDOT finds FHWA's proposed concept alternative prudent and feasible, then the Division Administrator would work to get the IMR approved on the National level (System-to-System Level Interchange Modification Requests are approved in Washington)

FHWA WORK SESSION
June 28, 2004

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 2:00 pm
Location: GDOT – Urban Design Conference Room

Attendees:

Mr. Joe Palladi	GDOT - Planning
Mr. Ben Buchan	GDOT - Urban Design Engineer
Mr. Glenn Bowman	GDOT - Assistant Urban Design Engineer
Mr. Chuck Hasty	GDOT - Urban Design Project Manager
Ms. Marlo Clowers	GDOT - Urban Design
Mr. David Painter	FHWA
Mr. Walter Boyd	FHWA
Mr. Brad Hale	Moreland Altobelli - Consultant Project Manager
Mr. Patrick Smeeton	Moreland Altobelli – Environmental/Planning

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Purpose: MA has developed an alternative concept layout for the above referenced project based on comments received from FHWA at a meeting held on March 17, 2004. The purpose of this meeting was to discuss this alternative with FHWA before proceeding with further analysis and public involvement.

Meeting Highlights

- Discussion of WB exit ramps on I-16
  - Painter liked the idea of bringing Coliseum on ramp onto mainline and not the CD.
  - FHWA wants to bring 2nd Street under mainline I-16.
  - FHWA willing to support a drop lane for WB CD offramp to 2nd and Spring and to bring on Coliseum as an add lane onramp to mainline

- I-75SB to I-16 EB split
  - Should I-16 exit to the left or right – some discussion
  - There will be a larger impact to the wetlands if we take the CD off prior to the big interchange
  - Constructability an issue
  - CD outside the big interchange is not modeled in the regional plan
  - 4 exits of CD – can't sign
  - Need to split I-16 and I-75 prior to the local interchange exits
  - Crux of FHWA's issue is to have CD system separate service level traffic away from mainline
  - FHWA – As Riverside area develops, it would be harder and more expensive to take land for the CD's at a later date
  - FHWA said the bringing back the I-75 to I-16 diverge to allow more distance to the CD diverge would be worthy of consideration
    1. They want to pull back the I-16/75 split then pull back the CD split to even out the exits. – They could live with that

- I-75NB to I-16 split
  - FHWA foes not like the 75NB split to I-16 then the split to the CD.
  - Ben – sight distance an issue
  - Major weave on the CD prior to Spring explained. Joe agreed
  - FHWA willing to look at am exit ramp from I-16 mainline to Coliseum instead of from CD

FHWA WORK SESSION
July 26, 2004

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 10:30 am
Location: GDOT – Urban Design Conference Room

Attendees:

Mr. Joe Palladi	GDOT - Planning
Mr. Ben Buchan	GDOT - Urban Design Engineer
Mr. Chuck Hasty	GDOT - Urban Design Project Manager
Mr. David Painter	FHWA
Mr. Brad Hale	Moreland Altobelli - Consultant Project Manager
Mr. Patrick Smeeton	Moreland Altobelli – Environmental/Planning

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Purpose: An alternative concept layout for the above referenced project (alternative #9) was developed by MA based on comments from the meeting held on June 28, 2004. The purpose of this meeting was to discuss this alternative with FHWA before proceeding with further analysis and public involvement.

Meeting Highlights

The discussion focused primarily on FHWA's four recommendations from March 17, 2004. The following is an outline of each issue and the final recommended course of action.

1) **Remove weave on westbound collector distributor (CD) road between Coliseum Drive and Second Street.** This issue was resolved at the 6-28-04 meeting. Alternative #9 includes the following modifications to the preferred concept alternative:
    - The exit ramp from I-16 westbound to Second Street now 'braids' over the entrance ramp from Coliseum Drive. This eliminates the weave on the westbound CD between Coliseum Drive and Second Street.
    - The third lane on I-16 westbound is now developed after the exit to Coliseum Drive as an auxiliary lane for a parallel-type exit to Second Street. This corrects the hidden exit to Second Street (behind the railroad overpass) that existed with previous alternatives. The third lane (auxiliary lane) is added back to I-16 westbound with the entrance ramp from Coliseum Drive.
    - The exit ramp (gore location) from I-16 westbound to Coliseum Drive has been shifted approximately 1300' to the east. This is necessary for adequate signage / distance between the successive Coliseum Drive and Second Street exits. Retaining walls will be necessary to avoid increasing the interstate footprint through the Ocmulgee National Monument / TCP.

2) **Reverse configuration of I-75 southbound / I-16 eastbound split.** This issue was resolved at the 6-28-04 meeting. Alternative #9 includes the following modifications to the preferred concept alternative:
    - The exit to I-16 eastbound from I-75 southbound has been moved to the right side of I-75 and has been shifted approximately 4000' feet north. The new I-75 SB / I-16 EB split occurs approximately 4000' south of the proposed entrance ramp from Riverside Drive to I-75 SB (per project NH-IM-75-2(211). This will increase impacts to wetlands located between I-75 and the Norfolk Southern railroad, and MOT / stage construction will be more difficult.
    - I-75 SB and I-75 NB now share a common alignment through the I-16/I-75 interchange.
    - The exit to Spring Street from Ramp ISE (I-16 EB) has been shifted approximately 1400' north/west.

3) **Combine exit ramps to Spring Street, Second Street, and Coliseum Drive from I-75 NB and SB – accomplished via a CD network.** The goal of this recommendation was to improve driver expectancy and overall traffic operations by removing service level exit ramps from within the system level interchange. An alternate configuration to FHWA's initial proposal was discussed and agreed upon at the 6-28-04 meeting. The exit to Spring Street (via I-75) is still independent from the WB CD (which services Second Street and Coliseum Drive), however, the Spring Street exit ramps via I-75 SB and I-75 NB have been shifted north and south, respectively. To achieve this, the following modifications to the preferred concept alternative were necessary under alternative #9:
    - The I-75 NB / I-16 EB split was shifted approximately 4500' south. The new location for this diverge is in-between Hardeman Avenue and the Walnut Street overpass. This will require re-construction of the Riverside Drive, Walnut Street, Hardeman Avenue, and Forsyth Street roadway bridges over I-75 and the David Lucas pedestrian bridge over I-75.
    - The entrance ramp from Hardeman Avenue to I-75 NB will braid over Ramp INE (the ramp from I-75 NB to I-16 EB).
    - Impacts to the Pleasant Hill Historic District as a result of this alternative include: 1) Permanent closure of Middle Street (frontage road adjacent to I-75 NB); 2) Cul-de-sacs for First Ave., Second Ave., Fourth Ave., and Fifth Ave. on the east side of I-75; 3) 32 Parcels will be impacted with at least 10 displacements.

4) **Reverse configuration of I-75 southbound / I-16 westbound merge (merge I-16 traffic on right side of I-75 SB).** This configuration requires the merge location for the I-16 WB entrance to I-75 SB to be shifted at least 1400' south (versus previous alternatives). The remaining distance between the I-16 WB entrance ramp and the exit to Hardeman Avenue (2000') is insufficient to safely merge the traffic from the WB CD road onto I-75 SB. The following options for the Hardeman Avenue exit from I-75 SB were discussed at the 6-28-04 meeting: 1) A braided ramp; 2) Adding an exit ramp to Hardeman Avenue from I-75 SB prior to the I-16/I-75 interchange which would connect to a CD network. Access to Hardeman Avenue from WB I-16 would be achieved via the exit to Second Street and the WB CD.

    In order to minimize impacts to the Pleasant Hill Historic District (adjacent to I-75 SB), MA's alternative #9 depicted the second option outlined above. Signing the WB I-16 exit to Second Street as a joint exit with Hardeman Avenue will be undesirable for driver expectancy, but it was agreed that this would be more desirable than impacting Pleasant Hill with a braided ramp.

Other design issues discussed:

- **Fourth lane for I-75 SB between Forsyth Street and Mercer University Drive.** MA's preliminary traffic analysis for alternative #9 indicated a capacity problem on this section of I-75 SB. At this location, I-75 SB is currently three lanes wide. MA's projected peak hour traffic volumes (year 2025 pm DHV = 6975) will require a fourth lane in the design year. GDOT requested that MA analyze the base year, etc., determine the year that this section fails, and make a recommendation for a separate project to widen I-75 south of Forsyth Street.

- **Modifications to the ramp / CD network along I-16 EB.** Under alternative #9, the following modifications have been made to this section of the project:
    - The entrance ramp from Spring Street to I-16 EB has been closed.
    - The exit ramp to Second Street from the EB CD has been modified to exit from the right.
    - The exit ramp to Coliseum Drive was shifted closer to the interstate mainline to avoid impacts to the Ocmulgee Heritage Trail.
    - The eastbound entrance ramp from Second Street now braids over the eastbound exit to Coliseum Drive. The entrance gore for this ramp has been shifted 750' east due to the change in profile with the braided ramp.
    - The eastbound entrance ramp from Coliseum Drive has been realigned through the end-span of the Central of GA railroad bridge. This will require a tie-back retaining wall and narrow shoulders under the bridge. Retaining walls will be necessary to avoid increasing the interstate footprint through the Ocmulgee National Monument / TCP.

- **MOT / construction staging issues.** The following locations were noted as potential MOT / construction staging problems with Alternative #9:
  - The proposed I-75 mainline bridge over Ramp ISE (ramp from I-75 SB to I-16 EB) and the Norfolk Southern Railroad may require temporary detour pavement and several stages to complete. Minor modifications to the current alignment and profile may be necessary to better facilitate MOT.
  - Reconstruction of the Riverside Drive, Walnut Street, Hardeman Avenue, and Forsyth Street bridges over I-75 may require temporary lane closures (on the surface streets) to avoid impacts to adjacent cemeteries and historic districts.
  - The Ramp ISE and EB CD bridges over the Ocmulgee River will be difficult to construct as currently designed under alternative #9. Temporary structures may be necessary to facilitate MOT at this location.
  - Temporary lane closures may be necessary on Second Street in order to raise and widen the bridge over the river and I-16.

  MA will investigate alternatives for each of the above locations.

- **Sidewalks and pedestrian trail connectivity issues.** The locals have expressed concern with connectivity between the recently constructed Ocmulgee Heritage Trail, an extension of the trail on the other side of the river, and the Ocmulgee National Monument. Options for a pedestrian bridge, sidewalk extensions, etc. will be discussed with the CAC.

Another coordination meeting between GDOT and FHWA (including Paul Mullins and Bob Callan) will be held prior to scheduling the next CAC meeting.

ACTION ITEMS

- Update design year (2025) for the projected traffic volumes (MA)
- Analyze traffic for different years (starting with base year) on alternative #9 using CORSIM. Determine the year that traffic fails on I-75 between Forsyth Street and Mercer University Drive and recommend a separate project to add a fourth lane at this location (MA).
- Roadway profiles and sections (as necessary) to determine constructability of alternative #9 (MA)
- Cost estimate for alternative #9 (MA)
- Develop list of issues with the preferred concept alternative for the CAC (MA)
- CAC agenda (MA)
- Add signage to alternative #9 display (MA)
- Schedule next coordination meeting (GDOT/FHWA)
- Draft project newsletter (MA)

MEETING BETWEEN GDOT and FHWA

May 20, 2005

The purpose of the meeting was to discuss the status of outstanding approvals from FHWA.

I-16/ I-75

Prior Status: The EA, IMR, & VE Study have not been approved for this project. On 5/17/05, Urban Design, consultants, and FHWA met and agreed that the latest CAC suggestions could not be accommodated in Alternate #9. Alternate #9 is therefore the current preferred alternative with the following exception: David Painter wanted additional time to review if the weave from I-75 north & south to eastbound I-16 was properly addressed. Urban Design and FHWA agreed to determine if the approved revised EA could serve as approval of the IMR.

Results:

1. The weave between traffic from I-75 north & south and I-16 eastbound was found to be acceptable as shown in Alternate #9 due to low conflicting volumes (MAAI analysis results showed LOS C). FHWA agreed with the lane configuration shown in Alternate #9. ***The issue is closed.***

2. Alternate #9 currently has three through lanes on I-16 eastbound after the CD exit to the end of the project. FHWA and GDOT agreed to investigate dropping one mainline eastbound through lane after the CD exit in order to possibly reduce the distances needed for tapers/lane drops to the end of the project. However, the overpass bridges should be long enough to accommodate three lanes minimum should the need arise in the future. ***This issue is open.***

3. Impacts are expected in the historic minority Pleasant Hill community adjacent to I-75 south under Alternate #9. However, through the context sensitive design/engineering intensive approach that has been taken to date, it is believed that Alternate #9 will be selected since no other feasible/prudent alternative has been identified. It was agreed that the impacts should be mitigated to the extent possible and that $5 million was a reasonable initial budget for mitigation efforts. ***The issue will be worked out through the environmental document.***

4. FHWA and GDOT agreed that the revised IMR should be a stand alone document with separate approval, to prevent the IMR from hindering approval of the EA and completion of the NEPA process. The revised IMR can be inserted as an appendix in the EA if necessary. The target date for an IMR submittal to the FHWA is 6/1/05 which coincides with a meeting between the FHWA Division Administrator and the GDOT Commissioner. ***The issue is open***

Next Steps:

1. **June 1st** Meeting with FHWA Division Administrator
2. **June 14th** Citizen's Advisory Committee Meeting
3. GDOT to brief City Council
4. GDOT to meet with neighborhoods/groups to discuss mitigation efforts
5. Draft EA to FHWA
6. Hold Public Hearing

Action Items:

1. MAAI to modify Alternate #9 to drop one through lane on eastbound I-16 after the CD exit to 2nd/MLK.

2. MAAI to complete revised IMR and submit to GDOT by **May 31, 2005**.

Attendees:

Mark Bartlett, FHWA
David Painter, FHWA
Buddy Gratton, GDOT
Ben Buchan, GDOT
Glenn Bowman, GDOT
Marlo Clowers, GDOT

ATTACHMENT #7

ADVISORY COMMITTEE MEETING MINUTES

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary

Centreplex
March 2, 2000
4:00-6:00 p.m.

Advisory Committee Participants:
Maryel Battin, Macon Heritage
Lynn Cass, Macon Bibb Co. Transit
Sid Cherry, Downtown Council
Conie Mac Darnell, New Town Macon
Jim David, Ocmulgee Nat'l Monument
Elliott Dunwody (stand in for Gene Dunwody), Dunwoody, Beeland, Azar, Walsh & Matthews
Daniel Fischer, Caution Macon
Regina McDuffie, Centreplex
Paul Nagle, Chamber of Commerce
Anita Ponder, Macon City Council
Rev. David Stanley, Assn. of Black Ministers
Johnny Wingers, Bibb Co. EMA

Project Team Participants:
Joseph Palladi, GDOT
Angela Alexander, GDOT
Rebecca Gifford, GDOT
David Miller, GDOT
Genetha Rice-Singleton, GDOT
David Grachen, FHWA
Brad Hale, MAAI
Spooner Phillips, MAAI
Todd Hill, MAAI
Karen Serio, MAAI
Melissa Moreland Bourbeau, MAAI
Liz Sanford, Sycamore Consulting
Denise Watts, Sycamore Consulting

Discussion Summary

Mr. Joseph Palladi opened the meeting with self-introductions. Committee members were asked to state what perspective they bring to the table. The responses were noted on a large flip chart. They included:

- Economic development
- Linkages with downtown/access to downtown
- Business interests
- Accidents/safety/evacuation
- Transit interests
- Ocmulgee National Monument & the greenway project
- Centreplex interests – traffic, highway location, special events
- City of Macon – general
- Historic resources
- Broad planning approach/quality of life
- Transportation – Macon's heritage/connectivity/smart growth
- Input from ministers

All invited advisory committee members were present, with the exception of two members, Mr. Keene with Norfolk Southern and Ms. Bunner, the Native American Council Representative.

Mr. Palladi then discussed the purpose of the meeting, presented a brief summary of the public comments received to-date, and presented an overview of planned public involvement activities. (Summaries of these items were included in the Advisory Committee packet.) He also stated that the role of the Advisory Committee is to consult with the project team on various issues and advise them on possible ways to address these issues. He explained some of the steps of the plan development process, stating that project alternatives would be identified, including a no-build option. He also noted that the no-build option means that current safety and operational issues will go unaddressed.

At this time, Mr. Palladi introduced Liz Sanford, the meeting facilitator. Ms. Sanford reviewed ground rules for the meeting and asked participants, "What are your goals, expectations and values concerning the project?" The comments are listed below. The numbers to the right of a comment indicate that the response was expressed more than once.

- Need to address traffic problems including weaving, Spring St. merging and congestion
- How long will it take to do this project? (2)
- Prefer concrete barriers instead of solid lines to divide opposing traffic
- Need to improve overall safety (5)
- Macon needs a "front door"; good first impression from interstate (3)
- Improve access to downtown Macon (2)
- Minimize impacts to river
- We have opportunity to improve Macon, to move rail and create transportation corridor and to reclaim waterfront. This is the time. (2)
- Aesthetics. Seeing freeway from city. Maximize capability of freeway to alleviate traffic on local roads. Enhance other aspects of Macon. Relieve traffic hot spots. (4)
- Landscaping. No kudzu! Put wildflowers in budget.
- Address floodplain.
- Elevation questions. Minimize impacts to neighborhoods.
- Maintain Centreplex facility and property. Enhance ingress/egress for special events. Minimize traffic impacts of events. Access to building.
- Be connected to downtown, not divided. Look to future. (3)
- Concern about impacts to monument, a world-class resource. Greenway, aesthetics, visual environment
- Issues include truck traffic, avoiding Grey Highway and routing through town. Design to discourage this movement.
- Logging trucks.

Mr. Palladi agreed with these comments and discussed further why this project is needed including increased traffic, mobility needs, and operational and safety improvements. Mr. David asked if the need and purpose of the project had been identified. Mr. Palladi explained that the major issues are known, however, the final development of the need and purpose is not complete. Mr. Phillips pointed out that a summary of the known needs could be found in the advisory committee packet. Mr. Grachen stated that the studies had to be initiated in order to move through the NEPA process and to define the purpose and need.

Next, Brad Hale presented an overview of the scope and schedule for the project. He informed the group that the preferred concept would be selected later this spring. Completion of the draft environmental document is scheduled for Fall 2000. Mr. Hale also reviewed the existing conditions of the area, including environmental features and key city features such as tourist attractions. He pointed out that the accident rates for 1997 and 1998 were double the state average for the same period. In particular, Spring Street is a hot spot with 77 accidents during that time frame. Mr. Phillips stated that the project team is conducting an archaeology study. There was also a discussion regarding the TCP boundary.

Six preliminary concept maps were distributed and discussed. Mr. Hale briefly noted some of the pros and cons of the different concepts. This lead to a discussion among the committee members.

Discussion Points:

- There were several requests for origin and destination data. Mr. Palladi explained that this information was collected as part of the transportation planning process, which is a step leading up to project identification.

- One committee member asked how far into the future these plans go and do they take into account other potential transportation alternatives such as passenger rail? Mr. Hale explained that the planning work goes through 2024, and yes, the planning model addresses other modes of transportation.

- The project team was asked if one of these preliminary concepts was already preferred. Specifically, the question was raised as to why lane numbers were on map #1 and not the others. Mr. Hale explained that it was a late night preparing these maps and those numbers should not appear on any of the maps.

- There was a discussion about how to balance the desire to make it easier to pass through Macon while still creating a front door to visit the city.

- One question asked if there was any information yet on properties to be purchased. Mr. Palladi explained that it is too early in the process to know these details.

- The project team was asked when information regarding the concept of moving the railroad would be available. Mr. Palladi explained that the preferred concept would be identified first. Then, an evaluation of the impact and potential for moving the railroad can be finalized.

<u>"Parking Lot" Discussion Items</u>

Several topics arose that could not be addressed at this meeting due to time limitations. However, they were noted so they can be addressed at a later date. These include:

- Macon's potential non-attainment status and impact on this project
- Request to provide aerials and elevations as visual aids at public meetings.
- How to factor in the Fall Line Freeway
- Information on origin and destination studies
- Major economic development program and its incorporation into the project
- Fly-over ramp for Emory to I-16
- Relocation of I-16

In closing, Ms. Sanford asked if there were any suggestions for making the next meetings more productive. Several participants expressed opinions about how to format general public meetings. It was recommended that the public be allowed time to talk publicly about their opinions and not just be asked to complete a comment card. There is a place for open meetings, however, committee members stressed that other techniques are needed. It was pointed out that comments can also be provided by visiting the website or calling the project hotline. Mr. Grachen suggested that a repository of information be established at a local venue such as the Centreplex or the Chamber of Commerce.

Ms. Rice-Singleton with GDOT informed the group that the Department is in the process of updating the Macon transportation plan and encouraged everyone to attend future public meetings for that project.

Ms. Sanford closed the meeting by informing the committee that they will be asked to provide more detailed comments on the six preliminary concepts at the next meeting. She stated that the next meeting would likely be held later in the spring. If there are any comments or questions before that time, committee members were invited to contact Mr. Palladi or Ms. Angela Alexander at GDOT. Alternatively, they were advised to contact the project team through the website and hotline.

The meeting was adjourned to a date and location to be determined.

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary

Centreplex
April 27, 2000
4:00-6:00 p.m.

Advisory Committee Participants:
Lynn Cass, Macon Bibb Co. Transit
Sid Cherry, Downtown Council
Conie Mac Darnell, Newtown Macon
Guy Lachine, Ocmulgee Nat'l Monument
Eugene Dunwody, Dunwody, Beeland, Azar, Walsh & Matthews
Daniel Fischer, Caution Macon
Mike Irvin, Norfolk Southern
Regina McDuffie, Centreplex
Paul Nagle, Chamber of Commerce
Johnny Wingers, Bibb Co. EMA

Project Team Participants:
Joseph Palladi, GDOT
Angela Alexander, GDOT
Rebecca Gifford, GDOT
Genetha Rice-Singleton, GDOT
David Grachen FHWA
Brad Hale, MAAI
Christine Lee, MAAI
Todd Hill, MAAI
Tim Heilmeier, HNTB
Liz Sanford, Sycamore Consulting
Denise Watts, Sycamore Consulting

Others:
Gary Adams, Macon Police Dept.
N. Pietrzak, Macon Citizen

Discussion Summary

Ms. Liz Sanford opened the meeting with a review of the agenda, rules of discussion and self-introductions. Mr. Joseph Palladi introduced Ms. Genetha Rice-Singleton as the new project manager for the I-16/I-75 Improvements Project and informed the group that Ms. Angela Alexander, previous project manager, had been promoted to Assistant State Urban Design Engineer.

Mr. Palladi reminded the group of their homework, which was to review the preliminary concepts in preparation for today's discussion on the pros and cons of each concept. He also gave an overview of some basic traffic engineering terms and standards. Some of the terms Mr. Palladi elaborated on were interchange spacing, auxiliary lanes as it relates to acceleration and deceleration lanes and stage construction.

Mr. Palladi explained the "weave" factor, which refers to the crossing paths of vehicles. He stated that the following three factors affect weaving:

- highway speed
- traffic volumes
- distance between successive ramp terminals.

Lane balance and signage are also critical. Diagrams were used to illustrate the number of lanes recommended for merging roadways.

Mr. Darnell pointed out that efficiency vs. usefulness is another primary issue that should be evaluated. Mr. Palladi agreed that effectiveness and speed are issues. He also stated that other factors, such as aesthetics, noise, and lighting, are important. Photos of various landscaping, noise and retaining wall options were posted for the committee to review during their group discussion.

At this point Ms. Sanford referred to the meeting handout on "Parking Lot Issues". Brief responses to non-agenda topics from the last meeting were provided in the handout.

Brad Hale reviewed the preliminary concepts presented at the first Advisory Committee meeting. The concept used by GDOT to negotiate the contract cost is a collector-distributor system along I-16. It uses braided ramps and adds lanes in each direction on I-75 in order to achieve lane balance. There were several questions about how this concept would provide for access to the Centerplex. Mr. Palladi explained the issue in more detail. Mr. Grachen stated that an ATMS system could also assist in directing traffic during events at the coliseum. Mr. Palladi stated that elements from different concepts could be combined for a preferred concept. The preliminary concepts presented are for illustration and discussion only at this point.

Mr. Darnell asked if the number of exit ramps could be increased to provide more access to downtown Macon. Mr. Palladi reminded the group that adding additional interchanges could create unsafe weaving sections due to close spacing of ramp terminals. He pointed out that Macon is fortunate to have a street grid system that helps in the distribution of vehicles exiting the interstate.

Mr. Lachine suggested adding a half diamond interchange on I-75 at Riverside Drive just south of the I-16/I-75 interchange. Several committee members agreed that access to the interstate from Riverside Drive would be desirable. Mr. Palladi reiterated that additional ramps could create unsafe weaving movements. Mr. Lachine asked why the distance between ramp terminals for the proposed I-16 interchanges could be less than the distance between suggested ramps from Riverside at I-75 with existing ramps at Hardeman Avenue. Mr. Palladi stated that the concept drawings for I-16 are not final and that the exact footprint of the project has not yet been determined. Mr. Hale added that the proposed ramps for the I-16 interchanges connect with proposed collector-distributor roads, which have a slower design speed than the interstate. This would allow closer ramp spacing without creating an unsafe weaving movement.

Mr. Hale continued with his discussion of the preliminary concepts:

Concept 1 -	Focuses on minimal impact to the area east of Coliseum Drive including Ocmulgee National Monument.
Concept 2 -	Avoidance of braided ramps and includes signals at cross streets
Concept 3 -	Texas U-turns at Coliseum Drive
Concept 4 -	Left hand exits to avoid braiding ramps
Concept 5 & 6 -	One-way pairs and left hand exits to avoid braiding ramps

After this brief review of the concepts, Ms. Sanford led the group in a discussion of the pros and cons of each. Mr. Lachine stated that from the point of view of the Ocmulgee National Monument, the six new concepts were better than the current concept because each proposed less impact to the monument. The detailed discussion of pros and cons is summarized on the attached table.

The following summarizes the basic comments from this group exercise:

- A Compact design is a desired feature
- The 2nd Street exit in the current design is preferred
- Access to Coliseum Drive from multiple directions is desired
- Less impact on Ocmulgee National Monument is important
- Pedestrian facilities are desired
- Aesthetics are important, especially at ingress and egress points

Mr. Darnell informed the group of a letter supporting a Macon commuter rail line. Mr. Palladi informed the group of a meeting on May 4th to discuss the rail project.

"Parking Lot" Discussion Items

There were a few more topics added to the "parking lot" that could not be addressed at this meeting due to time limitations. These include:

- Is it possible to increase the number of on/off ramps? Are exceptions ever made? Can traffic be distributed into the grid road system?
- How will the new design access the entrance to the Centerplex?
- Would a half diamond interchange at Riverside Drive and I-75 alleviate any of the traffic approaching I-16? A Parking & Circulator study now underway might tie into this project.
- How will the proposed Fall Line Freeway Interchange with I-16 affect this project?

In closing, Mr. Palladi stated that the team would continue to look at the environmental impacts in their concept development process. Ms. Sanford closed the meeting by informing the committee that they will be asked to provide more comments on the concepts at the next meeting.

The next meeting will be in June. The date and location of the next meeting will be determined. The meeting was adjourned.

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary #3

Centreplex
August 3, 2000
4:00-7:00 p.m.

Advisory Committee Participants:
Elaine Bolton, Macon Heritage Foundation
Grace Bunner, Native American Council
Connie Mac Darnell, Newtown Macon
Jim David, Ocmulgee Nat'l Monument
Daniel Fischer, Caution Macon
Joel Harrell, Norfolk Southern
Regina McDuffie, Centreplex
Paul Nagle, Chamber of Commerce
Anita Ponder, City Council
David Stanley, Minister
Johnny Wingers, Bibb Co. EMA
Sid Cherry, Downtown Council
Sandra Bush, Resident

Project Team Participants:
Joseph Palladi, GDOT
Angela Alexander, GDOT
Rebecca Gifford, GDOT
Genetha Rice-Singleton, GDOT
Bob Chaapel, FHWA
Brad Hale, MAAI
Garrett Sauber, MAAI
Glenn Scarborough, MAAI
Karla Poshedly, MAAI
Todd Hill, MAAI
Melissa Moreland-Bourbeau, MAAI
Jeff Gardner, Brockington & Assoc.
Tim Heilmeier, HNTB
Liz Sanford, Sycamore Consulting
Denise Watts, Sycamore Consulting

Discussion Summary

Ms. Liz Sanford opened the meeting with a review of the agenda, rules of discussion and self-introductions. Mr. Joseph Palladi announced that the following people would be joining the group as new members of the Advisory Committee:

Ms. Sandra Bush, Macon resident and member of the Pierce / Arkwright Advisory Committee
Ms. Elaine Bolton, Macon Heritage (replacement for Ms. Maryel Battin)
Ms. Grace Bunner, Native American Council
Mr. Richard Enesley, Pleasant Hill resident

Mr. Palladi stated that the primary purpose of the meeting was to review the remaining concept alternatives and identify a preferred alternative. Mr. Palladi then discussed the criteria to be used in evaluating the alternatives. This included an explanation of level of service (LOS), highway capacity software (HCS), average daily traffic (ADT), design hourly volume (DHV), and stopping sight distance. *For definition of these and other terms, please refer to the project website (**www.i16i75.com**).*

Mr. Palladi explained the different LOS ratings from A to F. He stated that urban areas are designed to meet at least a LOS D. This project area encompasses both interstate and surface streets, including Spring Street, which is currently functioning at LOS F during peak periods.

Mr. Brad Hale led the discussion about the project goals as defined by the ACM members at the first meeting. A color matrix chart listing each alternate with a rating of excellent, good needs improvement or unacceptable in relation to the projects goals was given to each ACM member. Mr. Hale discussed the matrix in detail. A new concept alternative (alternative #7) was introduced as a hybrid of earlier concepts, incorporating their most desirable features.

Before continuing further with a discussion of how each alternative was evaluated, two outstanding issues from previous ACM's were discussed. These issues included the suggested half diamond interchange of Riverside Drive and I-75, relocating the Norfolk Southern railroad, and a left hand exit ramp from I-75 SB to Riverside Drive via the former K-Mart parking lot.

I-75 / Riverside Drive half diamond interchange

Mr. Hale explained that due to the close proximity of Riverside Drive to Hardeman Avenue, the proposed ramps from Riverside Drive to I-75 (NB exit ramp and SB entrance ramp) would need to be braided with the ramps from Hardeman Avenue to I-75 (NB entrance ramp and SB exit ramp). Ramps from Riverside Drive connecting directly with the core lanes of I-75 would not have enough distance from the Hardeman Avenue ramps to satisfy AASHTO and MUTCD criteria (i.e. unsafe weaving movements would occur). Mr. Hale showed through line diagram format how the construction of braided (grade separated) ramps would greatly impact the Pleasant Hill District.

Mr. Glenn Scarborough, a traffic engineer with Moreland Altobelli, explained how the traffic had been analyzed at the Hardeman Avenue/Forsyth Street @ I-75 and Spring Street @ I-16 interchanges with and without the half diamond interchange at Riverside Drive. It was shown that the only intersection where the (LOS) improved was the I-75 NB exit ramp at Forsyth Street. Analysis of this intersection showed that the LOS would change from D to C with the introduction of an additional exit ramp from I-75 NB to Riverside Drive. It was concluded that this minor improvement could not justify the construction costs and impacts to the Pleasant Hill Historic District associated with the additional interchange at Riverside Drive.

Norfolk Southern Railroad Re-location

Mr. Hale stated that Moreland Altobelli has performed a study to assess the changes that would be necessary to the I-16/I-75 interchange project in order not to preclude a separate project to re-locate the Norfolk Southern railroad. Mr. Hale then stated that four possible alternatives for the railroad re-location were looked at as part of this informal study. These alternatives included:

1) Relocating the existing railroad to the North side of the Ocmulgee River.
2) Enclosing the existing railroad in a structure.
3) Relocating the existing railroad to another railroad line.
4) Constructing a Macon rail by-pass on new location.

After a brief discussion of the pros and cons for each alternative, it was concluded that re-location of the railroad within the limits of the project would not be feasible due to the elevation changes necessary to span the Ocmulgee River at the 100 year flood stage. It was recommended that any re-location of the Norfolk Southern rail line be done outside the limits of the I-16/I-75 interchange with a separate project.

Ms. Grace Bunner expressed concern that the railroad was part of the committee's discussion since the project is an interstate project. It was her understanding that any work affecting the Traditional Cultural Property (TCP) had to go through the Tribe of Nations. She pointed out that she had no knowledge of a possible railroad re-location. Mr. Palladi assured Ms. Bunner that the railroad re-

location would be a separate project that would require coordination with the Tribe of Nations if necessary, but at this stage of the I-16/I-75 project all reasonable requests by members of the Advisory Committee would be given consideration. Mr. Joel Harrell pointed out that the railroad re-location was not Norfolk Southern's idea but that Norfolk Southern would welcome a new rail line as long as they did not have to pay for it.

An E-mail was received from Lindsey Holiday requesting GDOT to examine a left hand exit from I-75 SB to Riverside Drive via the K-Mart parking lot. Mr. Palladi explained that neither GDOT nor FHWA would approve a design with a left hand exit from the interstate. Mr. Bob Chaapel, with FHWA, concurred with Mr. Palladi's statement. In addition, the geometrics of such a ramp would be undesirable and it would be difficult to prevent motorists from accidentally turning onto the ramp from Riverside Drive and going the wrong way.

Mr. Jim David asked about the possible Emery Highway Flyover Bridge to I-16. It was his intent to have the ramp extend from Emery Highway SB directly to I-16 WB, which would alleviate traffic at the Spring Street intersection. The analysis he had seen shows a connection from I-16 EB to Emery Highway NB. Mr. Palladi stated that essentially the same problems would result. Grade changes on Emery Highway would be severe. In addition, this ramp would create a bad-weaving section on the WB collector distributor. Mr. Palladi pointed out that introducing a full interchange at Second Street would accomplish this same movement and at a much cheaper cost. The Emery Highway to I-16 direct connection was ruled out as an option.

Concept Alternatives – Analysis & Selection
The six alternative concepts and the initial concept (prepared by GDOT for cost estimating purposes) were reviewed briefly. Four of these alternatives were eliminated by the committee due to the following fatal flaws:

- Initial Concept – Unacceptable impacts to cultural resources (TCP and Ocmulgee National Monument).
- Alternative #4 – Poor driver expectancy due to left hand exits from EB I-16 CD road.
- Alternative #5 – Poor driver expectancy due to left hand exits from EB I-16 CD road. Undesirable one-way operations on Spring Street and 2nd Street.
- Alternative #6 - Poor driver expectancy due to left hand exit from EB I-16 CD road. Undesirable one-way operations on 2nd Street and Coliseum Drive.

The remaining three conceptual alternatives (1, 2, & 3) and a new hybrid concept (Alternative #7) were then discussed. Line diagrams and the goals matrix were used to discuss the pros and cons of the remaining alternatives.

Alternative #1 – Alternative #1 was discussed in detail with several engineers from the consultant team offering explanations of various design criteria. The following is a list of the areas that the consultant outlined as needing improvement:

- Poor signage. A single Interstate sign containing multiple destinations is undesirable. This alternative would require signage for three exits (Spring Street, 2nd Street, and Coliseum Drive) at a single location.
- The EB I-16 CD road between I-75 and Spring Street has an undesirable weaving section.
- The WB I-16 CD road has a non-directional split at the I-16/I-75 interchange. This would result in poor driver expectancy.

- An unsafe condition occurs where the WB CD flyover ramp merges with the WB I-16 ramp immediately prior to a merge with SB I-75.

Although none of the problem areas mentioned were considered fatal flaws, it was agreed that Alternative #1 needed improvement.

Alternative #2 – It was pointed out that the primary goal with Alternative #2 was to reduce construction costs and decrease the footprint of the project by eliminating the braided ramps. To accomplish this, the ramp from Spring Street to I-16 EB was routed through an at-grade intersection with 2nd Street. The traffic studies showed that this intersection, as shown in Alternative #2, would operate at a LOS of F. Alternative #2, despite several desirable features, was therefore eliminated.

Alternative #3 – This alternative was shown to have some of the same positive features as Alternative #2 (reduced footprint and reduced construction costs), but some of the same negative features as Alternative #1 (poor signage, bad weave on CD road, non-directional split, and bad merge at I-75 SB). The traffic study for this alternative showed that the proposed Spring Street/EB CD road intersection would operate at a LOS of E. Since the objective of these roadway improvements is to achieve LOS D or better, Alternative #3 was formally eliminated.

Alternative #7 – Alternative #7 was then introduced to correct the deficiencies described in Alternative #1 while incorporating several positive features from Alternatives #2 and 3. The following is an outline of the problem areas from previous alternatives and how Alternative #7 corrects or improves these areas:

- Interstate signing. Several of the previous alternatives had up to five destinations at a single decision point, which can create erratic and unsafe lane changes due to poor driver expectancy. Alternative #7 corrects this problem by separating the Spring Street ramps from the EB CD road. This resulting EB CD road only requires signing for two destinations and places the exit nearly one-half mile closer to the destination points. This is a much more desirable situation for driver expectancy than that of Alternative #1.
- Non-directional split from WB CD road to I-75 NB and SB. The ramps in question were simply reversed and pulled closer to the mainline (compare line diagrams for Alternatives #1 and 7). The resulting ramps for Alternative #7 will have a directional split, i.e. the ramp to the right continues to the right on I-75 NB, and the ramp to the left continues to the left on I-75 SB. This should improve driver expectancy for motorists approaching the I-16/I-75 interchange.
- Unsafe merge of three ramps feeding I-75 SB. The flyover ramp from the WB CD road to I-75 SB was modified with Alternative #7 to merge with I-75 on the right instead of merging with the ramp from I-16 WB (please reference line diagram). This removed the undesirable merge of three ramps within close proximity.
- Undesirable weaving sections on CD roads. By separating the Spring Street ramps from the CD roads as shown on Alternative #7, all resulting CD road and mainline weaving sections operate at a LOS of C or better.
- Property impacts. The ramps and CD roads between 2nd Street and Coliseum Drive were re-configured with Alternative #7 to eliminate the braided ramps shown with Alternative #1. This should result in a more “compact” design requiring less Right-of-way from the Macon Centreplex and less impact to the 100-year floodplain.

The Advisory Committee agreed to move forward with Alternative #7 as the preferred alternative.

"Parking Lot" and Follow-Up Items

There were a few more topics added to the "parking lot" that could not be addressed at this meeting, or should be considered for future meetings. These included:

- Several committee members requested to see a signage plan, including informational signs for the Ocmulgee Nat'l Monument and the Macon Coliseum.
- Pedestrian facilities need to be addressed in preferred alternative.
- More detailed displays for the preferred alternative, including the plan view on aerial photography and cross-sectional views to illustrate the elevations of the new ramps and roadways.

In closing, Mr. Fischer complimented GDOT on the Advisory Committee process stating that it was well run and worthwhile. Mr. Palladi expressed his gratitude to committee members for their time and dedication. He also asked that they assist the project team at the upcoming public meetings to help present and explain the project to their community. It was agreed that the committee would meet before the next public meeting. Details regarding the time and location of the next committee meeting and the PIM will be provided at a later date.

The meeting was adjourned to a future date to be determined prior to a second Public Informational Meeting.

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary

Centreplex
September 28, 2000
4:30-7:00 p.m.

Advisory Committee Participants:
Elaine Bolton, Macon Heritage
Sandra Bush, Resident
Sid Cherry, Downtown Council
Jim David, Ocmulgee Nat'l Monument
Eugene Dunwody, Sr.
Richard Enesley, Pleasant Hills Community
Daniel Fischer, Caution Macon
Conie Mac Darnell, Newtown Macon
Johnny Wingers, Bibb Co. EMA

Project Team Participants:
Joe Palladi, GDOT
Angela Alexander, GDOT
Rebecca Gifford, GDOT
Genetha Rice-Singleton, GDOT
Brad Hale, MAAI
Patrick Smeeton, MAAI
Kandace Lewis, MAAI
Liz Sanford, Sycamore Consulting
Denise Watts, Sycamore Consulting

Discussion Summary

Ms. Liz Sanford opened the meeting with introductions. Mr. Joe Palladi provided a recap of the previous Advisory Committee meeting, noting that the committee had unanimously selected Alternative # 7 as the preferred design concept to move forward for further study. At the last meeting, the committee also requested that some additional maps and graphics be provided to help illustrate this concept more effectively to the public. Mr. Palladi also referenced the parking lot issues from the last meeting. These included: signage, landscaping, lighting, noise barriers, pedestrian facilities and aesthetics of the project. He stated that these issues will be addressed during forthcoming engineering design tasks.

Selected Design Concept

Mr. Brad Hale reviewed specific features of the selected concept using detailed aerial maps and sectional drawings. He stated that I-75 north of the I-16 / I-75 interchange would be four lanes in each direction. The I-16 / I-75 interchange itself would have a similar configuration to what it is today with additional ramps to accommodate the collector-distributor (CD) roads necessary along I-16. A computer enhanced photograph was provided to illustrate the appearance of the proposed ramp from the Westbound CD to Southbound I-75. The southern portion of I-75 would remain four lanes in each direction as it is today.

The Walnut street and Riverside Drive Bridges over I-75 would not have to be reconstructed with this concept. Due to the addition of CD roads along I-16, six bridges are proposed to replace the two bridges currently crossing the Ocmulgee River at the beginning of I-16.

Four lanes are proposed for both EB and WB I-16 between Spring Street and the I-16 / I-75 interchange. This would be reduced to three lanes East of Spring Street. CD roads are proposed along I-16 between the I-16 / I-75 interchange and Spring Street, and between Second Street and Coliseum Drive. The railroad bridge would not be disturbed by this concept. The Otis Redding Bridge (M.L.K.) over the Ocmulgee River will be widened and reconstructed to accommodate future traffic and to clear the 100-year flood of the Ocmulgee River.

The proposed bridge will include extra-wide (10 foot) sidewalks on both sides and "street-scaping" features such as alcoves with benches and/ or landscape planters.

Discussion

Following Mr. Hale's presentation, there was discussion about creating a pedestrian environment around the Centreplex by providing limited access to the River, and linking the facility to downtown Macon. More study would be needed to see how riverfront and pedestrian access could be enhanced in this area.

Potentials impacts to the Greenway project and the Shirley Hills community were discussed briefly. More input from the Greenway project will be needed as the project proceeds. The impact to Shirley Hills would be negligible except for the CD flyover from I-16 to I-75 south. A retaining wall would be constructed to minimize the footprint of the proposed CD road.

The necessity for sound walls was discussed. Mr. Palladi explained that GDOT policy is to use 69 decibels as the threshold for construction of a noise wall. Federal policy is to construct a noise mitigation barrier when there is an increase of 3 decibels or an overall threshold of 70 decibels. A noise study will be conducted to determine the need for noise barriers along the project area.

Mr. Hale explained that most of proposed construction falls within the existing interstate right-of-way, with some exceptions. These exceptions were detailed on the aerial maps. The Shirley Hills neighborhood will have minimal impacts and the design team is working to reduce these impacts even further.

When asked about public input regarding the design of the new bridges, Mr. Palladi stated that there would be opportunity for input on design and aesthetics, with limitations based on cost and construction feasibility.

The group also discussed lighting concerns. Mr. David asked that GDOT look into drop sky or night sky sensitive lighting. Mr. Palladi suggested that subcommittees be formed to address some of these specific issues.

The construction of berms and the impact on the floodplain were discussed. There was concern that berms would cause flooding upstream. Mr. Palladi stated that a hydraulic study will be prepared and will need to be approved by the U.S. Army Corp of Engineers. Environmental groups will have an opportunity to comment on these issues during the preparation of this study. Mr. Hale informed the group that a previous hydraulic study showed that the flooding problem begins at a railroad bridge which spans the river east of the study area for this project. He offered to provide a copy of this study to anyone interested.

One committee member asked about the project schedule. Construction of the proposed improvements would begin in 2003 and last for at least three years. The construction phase will be divided into four projects including I-75 north of the interchange, I-75 south of the interchange, I-16 and the Martin Luther King (MLK) Boulevard interchange. The MLK segment will be accelerated as per the request of the City of Macon.

Public Information Meeting

The next public information meeting is scheduled for October 24th, 4:00-7:00 pm at the Centreplex. The group discussed information and diagrams to be displayed at this meeting. As part of this discussion, Mr. Patrick Smeeton with MAAI demonstrated a TRAF-CORSIM model to illustrate

projected traffic flow with the proposed improvements. This animated model showed AM and PM peak traffic through 2025. The model is used to analyze the collector/distributor system, ramps and potential problem areas including accidents. The model includes traffic data from improvement projects at Pierce -Arkwright and Forsyth-Hardeman.

The committee agreed that this demonstration would be very beneficial at the public meeting because it is easier to conceptualize the actual traffic improvement. Mr. Palladi asked MAAI to also model the interchange without improvements and have this comparative information available for the public meeting.

The committee asked if additional computer enhanced photographs could be available at the public meeting to make it easier for the general public to understand the concepts. There was also discussion of possible cross-sectional drawings that would provide the public with representative design concepts including the view from Second Street, Shirley Hills, the south side of river and Spring Street. Mr. Palladi offered DOT staff support to assist MAAI with preparing these displays.

Committee members will be contacted by the project team to remind them of the public meeting. Everyone was encouraged to attend at least part of the meeting to help address questions about the committee's selection process. Committee member participation will be an important part of this public information meeting.

Members of the committee expressed a concern about the meeting format stating that Macon residents prefer town hall style meetings where speakers can address the whole group. Mr. Palladi stated that the GDOT policy was to use an open house format. However, he offered to talk to GDOT management and discuss the possibility of having an hour available for open public comment. The possibility of a panel format to address written comments was discussed. The committee encouraged GDOT to experiment with other public meeting formats. Mr. Palladi ensured the group that written comments hold the same weight as verbal comments.

The committee unanimously agreed that the displays and concepts discussed at this meeting would be presented at the public meeting on October 24th. In addition, copies of the recent newsletter will be available. Newsletters will also be available at the three information kiosk locations.

In closing, Mr. Darnell thanked Mr. Palladi for the team's presentation at the recent Commission on Macon-Atlanta Rail (COMAR) meeting stating that the information from the railroad study was very beneficial.

Mr. Palladi adjourned the meeting with a reminder for everyone to attend the public information meeting on October 24th.

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary

Centreplex
November 17, 2004
2:00-6:00 p.m.

Advisory Committee Participants:
Betty Lou Browne, Macon Heritage
Sandra Bush, Resident
Lynn Cass, Macon Bibb County Transit
Sid Cherry, Downtown Council
Eugene Dunwody, Sr., Dunwoody/Beeland
Mike Ford, Newtown Macon
Jim David, Ocmulgee Nat'l Monument
Daniel Fischer, Caution Macon
Regina McDuffie, Centreplex
Brian McDavid, Shirley Hills
Chip Cherry, Chamber of Commerce
Anita Ponder, Macon City Council
David Stanley, Minister

Project Team Participants:
Joe Palladi, GDOT
Ben Buchan, GDOT
Chuck Hasty, GDOT
Glenn Bowman, GDOT
Marlo Clowers, GDOT
Leesa Walker, GDOT
David Painter, FHWA
Brad Hale, MAAI
Pat Smeeton, MAAI
Will Sheehan, MAAI
Tim Heilmeier, HNTB
Liz Sanford, Sycamore Consulting
Leah Vaughan, Sycamore Consulting

Discussion Summary

Ms. Liz Sanford opened the meeting with introductions and meeting rules. Mr. Joe Palladi reiterated the project goals of improving safety and operational efficiency of the interchange, as defined in the project's Need & Purpose statement. He specifically mentioned the problems with traffic backup onto the mainline at the Spring St. exit from I-16 EB and the capacity problems on the one-lane ramp from I-16 WB to I-75 NB during hurricane evacuations. He also summarized the additional project goals as set by the Advisory Committee in 2000, state and federal criteria that must be met, and the constraints due to the project's location. He stated that the Department's goal was to develop a context sensitive design that also meets federal standards for safety.

After his opening remarks, Mr. Palladi then reviewed the process which led to the development of the preferred concept alternative (Alternative #7) in the year 2000. The first step was to provide the public the opportunity to comment on the problems within the project area at a Public Information Meeting (PIM) held in November 1999. The project team considered the comments received at the PIM while developing concept alternatives. Line diagrams (schematic concept drawings) for six alternatives were then developed and presented to the Advisory Committee for comment. After two meetings with the Advisory Committee, Alternate #7 (a hybrid of earlier alternatives) was developed and ultimately endorsed by the committee as the 'Preferred Concept Alternative'. Mr. Palladi also stated that this meeting was the last he would attend and that Ben Buchan would be assuming responsibility for this project on behalf of GDOT.

Mr. Ben Buchan then spoke about what has happened since the last meeting of the Advisory Committee in the Fall of 2000. Mr. Buchan noted the following as the primary tasks that have been completed in the last four years:

- **Railroad Relocation Study.** Moreland Altobelli prepared a railroad relocation study during the year 2000. The goal of the study was to provide downtown Macon with an

accessible riverfront. Four alternatives were initially studied. MA's study was expanded on by Joseph Passonneau (an engineer from Washington D.C. retained by Newtown Macon, Inc.). The City of Macon ultimately recommended that GDOT proceed with the preferred concept alternative without provisions for relocating the railroad within the project limits.

- **Value Engineering Study.** A value engineering (VE) study was conducted for the preferred concept alternative during March/April 2002. The VE Team included professionals from GDOT, FHWA, and Ventry Engineering (a consultant hired specifically for handling VE studies). Mr. Buchan explained that Value Engineering studies are required on all Federal-Aid projects with a total cost over $25 million. Brad will discuss modifications to the preferred concept alternative as a result of the VE study later in the meeting.
- **Re-evaluation of Preferred Concept Alternative.** In early 2003, GDOT received requests from Macon City Council and FHWA to consider modifications to the preferred concept alternative. Since then, the following potential modifications have been reviewed by the project team:
  1) Fewer bridges over the river,
  2) Changes to the collector-distributor (CD) system,
  3) Right hand entrance/exit ramps on I-75,
  4) Geometric ramp metering, and
  5) Separation of system and service level traffic.

Advisory Committee member, Brian McDavid, then made note of the City Council Meeting on February 11, 2003. Committee member (and Macon City Council president) Anita Ponder stated that at that meeting City Council voted unanimously to recommend that the scale of the project be reduced.

Local Design Alternatives

Mr. Brad Hale then presented a review of three alternatives submitted to GDOT as part of the public involvement process. Each alternative was evaluated with respect to the project goals as set forth by the committee in 2000. A comprehensive 'matrix' was provided that compared these alternatives to the each of the other alternatives developed by the project team. Mr. Hale noted that analysis of a particular alternative was terminated once a 'fatal flaw' was determined. Some alternatives, therefore, have been studied more than others.

He began by discussing the Passoneau Alternative. He mentioned that the cost of relocating the Norfolk Southern Railroad to the other side of the river would be approximately the same as building a Macon rail bypass, which was recommended as a result of MA's Railroad Relocation Study. In addition, the relocated rail line would have to be higher which would increase noise. Other faults with the alternative included the lack of access to I-75 SB from Spring St. Traffic wanting access to I-75 SB from Spring St. would have to go to Second St. and would overload the Second St. interchange. Mr. Hale then explained that the fatal flaw with the Passoneau alternative concerned the cost and constructability of lowering I-16 and raising Spring St. over the interstate. Spring St. itself would have to be closed for a period of two years to build this alternative.

The McCullough Alternative was discussed next. Mr. Hale explained that the fatal flaw with this alternative was that there is no interchange at Spring St. The traffic would normally access the interstate from Spring St. would have to use the Second St. interchange, which would cause undesirable congestion on the local street network. Advisory Committee member Brian McDavid then asked if solutions to the potential congestion on Second Street had been studied. Mr. Hale explained that the Macon-Bibb Planning & Zoning Office had done a preliminary planning-level

analysis. It would take an additional local project to transfer Gray Highway traffic to Second Street.

The Holliday Alternative was discussed next. The Holliday Alternative proposed to shift the I-16 alignment to follow that of the proposed Eisenhower Parkway extension. The location of the I-16/I-75 interchange would then be moved to the current location of the I-75/Eisenhower Pkwy. Interchange. Mr. Hale explained that the impacts of this alternative are much greater than the impacts of the keeping the I-16/I-75 interchange in its current location. As a comparison, Mr. Hale referred to an aerial photo showing the preferred concept alternative (Alternative #7) and asked the committee members to visualize the footprint of the proposed I-16/I-75 interchange on the current location of the I-75/Eisenhower Pkwy. interchange. Mr. Hale explained that there would be additional impacts - residential and environmental - to the Eisenhower Pkwy. corridor as it would have to be widened and improved significantly to accommodate interstate traffic. Ms. Ponder noted that there were impacts to several properties within the Pleasant Hill District with Alternative #9. She questioned whether the impacts along the Eisenhower Pkwy with the Holliday Alternative would be any worse than the impacts with Alternative #9. Mr. Hale responded that the Holliday Alternative had not been studied closely enough to determine the number of impacted properties. GDOT agreed to provide an estimate of the impacts with the Holliday Alternative for the next Advisory Committee Meeting.

After Mr. Hale's discussion of the Passoneau, McCullough, and Holliday alternatives, Mr. Joe Palladi added that the need and purpose developed by the Advisory Committee was not met with any of the alternatives commissioned by the locals. At this point, the floor was opened up to Advisory Member questions. Committee member Betty Lou Browne asked why the Passoneau Alternative could not be done without relocating the railroad. Mr. Hale answered by saying that maintaining the railroad in its current location does not improve the issues of cost and constructability of lowering I-16 and raising Spring St. over the interstate. Mr. Chip Cherry asked why one of the interchanges on I-16 to downtown could not be eliminated. Mr. Hale explained that the remaining two interchanges would not be able to handle the additional traffic if one of the interchanges was removed. In addition, the presence of partial interchanges on I-16 is one of the key problems listed in the original need and purpose as needing improvement.

<u>Changes to Preferred Concept</u>
As a result of the Value Engineering process and the Department's work sessions with the FHWA, a new alternative (Alternative #9) has been developed. Mr. Hale noted that this alternative includes the following modifications to the preferred concept alternative:

1. Reduce I-75 SB from four lanes to three lanes between Pierce Avenue and I-16.
2. Remove all left-hand ingress and egress from I-75 SB. *(It was noted that this was the most significant change to the preferred concept alternative. This change results in impacts to the Pleasant Hill Historic District and requires reconstruction of the Riverside Drive, Walnut Street and pedestrian bridges over I-75)*
3. Shift I-75 NB / I-16 EB split approximately ¾ mile south.
4. Re-configure the interchange ramps and bridges over the Ocmulgee River (reduce overall footprint over river and trail).
5. Reduce the EB CD from four lanes to three lanes between the Ocmulgee River and Spring Street.
6. Remove the entrance ramp from Spring Street to I-16 EB.
7. Re-align the EB CD between Spring Street and Coliseum Drive.
8. Reduce I-16 WB from three lanes to two lanes from Coliseum Drive to the end of the project.

9. Reduce the left turn from NB Coliseum Drive to I-16 WB from two lanes to one lane.
10. Connect the entrance ramp from Coliseum Drive directly to the I-16 WB mainline.
11. Reduce I-16 WB from four lanes to three lanes between the Ocmulgee River and Coliseum Drive.

Mr. Hale concluded his presentation with a comparison of the overall footprints between Alternative #7 and Alternative #9. He noted that for Alternative #9, the project footprint of the section of I-75 south of the interchange is larger, but the I-16 footprint is smaller. The ramp from Spring St. to I-16 EB had been eliminated, significantly decreasing the impacts to the Ocmulgee Heritage Trail. Also, the project footprint over the river had been reduced. The majority of the project is still within the existing right of way except for the area along I-75 between Hardeman Avenue and I-16.

At this point, the floor was opened up to questions and comments from the Advisory Committee members. Committee member Anita Ponder stated that it appeared the design team was giving more importance to the Ocmulgee Heritage Trail than it was to Pleasant Hill Historic District. She pointed out that with the latest alternative, Alternative #9, the impacts to the trail decreased while the impacts to Pleasant Hill increased. Mr. Hale replied that the additional impacts were due to the removal of the left hand exit/entrance ramps and the implementation of right hand entrance/exit ramps. The changes along the I-16 portion of the project were independent from the changes to I-75 adjacent to Pleasant Hill.

Committee member Brian McDavid expressed concern over the height of the flyover bridges and wanted a comparison with Spaghetti Junction in Atlanta. Mr. Hale answered that the highest point in the project would only be about half as high as the tallest bridge within the Tom Moreland Interchange (I-85/I-285 in NE Atlanta) and that the ramp grades would not be as steep, either. A maximum grade of 4% was used on the all mainline and collector-distributor roads on the project.

Committee member Rick Hutto inquired about impacts to Linwood Cemetery and Riverside Cemetery. He pointed out that Macon's only Congressional Medal of Honor winner is buried at Linwood Cemetery. Mr. Hale replied that none of the conceptual alternatives studied so far have any physical impact to the Linwood cemetery. Alternative #9 may, however, have a minor impact to the Riverside Cemetery, but no graves would have to be relocated.

Committee members Daniel Fischer and Sandra Bush both expressed concern over the size of the project and the design criteria – mainly the right hand entrance/exit criteria. They mentioned that it seemed like the design team was creating more difficult problems by trying to adhere strictly to the design criteria. At this point, Mr. Hale referred their comments to Mr. David Painter with FHWA. Mr. Painter gave a very thorough answer as to why the FHWA prefers right hand exits and entrances. He pointed out that right-hand exits and entrances are more desirable for driver expectancy, and provide lane continuity on the mainline. Some of the committee members then commented that many of the ramps in the current interchange are left hand entrances and exits already.

Committee member Jim David questioned the impacts to the Ocmulgee National Monument. Mr. Hale replied that the impacts to the Monument would be slightly greater, but would still be located within the existing easement through the use of retaining walls.

Committee members Brian McDavid and Daniel Fischer posed questions regarding the environmental impacts to the river and floodplain and to what extent the environmental study had been taken. Mr. Hale demonstrated that the impacts to the floodplain would be minimal because

the majority of the proposed earthwork is within the existing interstate footprint. This is accomplished with retaining walls, and ramps on viaduct structures when necessary. He noted that MA's Hydraulic Study indicated that the flood levels would only change by a matter of inches due to the proposed construction with Alternative #7.

Mr. Hale then directed the environmental study comments to Mr. Pat Smeeton of Moreland Altobelli. Mr. Smeeton explained that there are different levels of environmental study and that the level of study depends on the estimated impacts of the project. He also noted that all environmental documents must be approved by FHWA for Federal Aid projects. Committee member Daniel Fischer also asked if any modifications to the dyke could be done during this project to improve the flooding conditions in Macon. Mr. Hale explained that improving flood conditions is not within the scope of this project.

Committee member Daniel Fischer also inquired about the possibility for a pedestrian bridge over the river for the Ocmulgee Heritage Trail. Mr. Hale answered that a temporary bridge may be needed for maintenance of traffic during construction of the proposed permanent bridges. This temporary bridge could be transformed into a pedestrian bridge after the construction is complete.

Committee member Eugene Dunwoody provided a brief summary of the key issues for the Advisory Committee. He acknowledged that there are problems with the interchange and that something needs to be done to improve the situation. He thanked the design team for a comprehensive presentation and applauded the community involvement process. He asked the design team to consider modifying or eliminating the Spring Street interchange and that they not adhere so strictly to the right hand exit rule. He also stated that the high flyover bridges are not in the best interest of the community and requested more meetings to move things forward. Committee member Brian McDavid then requested that GDOT consider aesthetics and not just build plain concrete structures. He specifically mentioned an interchange he had seen recently in New Mexico that was painted beautifully to match the surrounding environment.

I-16/I-75 Improvement Project
Advisory Committee Meeting Summary

Centreplex
June 14, 2005
3:00-5:00 p.m.

Advisory Committee Participants:
Betty Lou Browne, Macon Heritage
Sandra Bush, Resident
Lynn Cass, Macon Bibb County Transit
Sid Cherry, Downtown Council
Eugene Dunwody, Sr., Dunwoody/Beeland
Mike Ford, Newtown Macon
Jim David, Ocmulgee Nat'l Monument
Daniel Fischer, Caution Macon
Brian McDavid, Shirley Hills
Chip Cherry, Chamber of Commerce
Steve Massey, Norfolk Southern Railroad

Project Team Participants:
Ben Buchan, GDOT
Glenn Bowman, GDOT
Marlo Clowers, GDOT
Theresa Holder, GDOT
Mary Mitchell, GDOT
David Painter, FHWA
Brad Hale, MAAI
Pat Smeeton, MAAI
Will Sheehan, MAAI
Bill Rabold, MAAI
Chris Kingsbury, MAAI
Tim Heilmeier, HNTB
Liz Sanford, Sycamore Consulting
Leah Vaughan, Sycamore Consulting

Discussion Summary

Ms. Liz Sanford opened the meeting with introductions and meeting rules. Mr. Ben Buchan then restated the project goals of improving the operational efficiency and overall safety of the interchange. He specifically mentioned the above average number of accidents that occur within the interchange each year. He then gave a brief summary of the concept development process to date followed by a slightly more detailed synopsis of the previous Advisory Committee Meeting (ACM #5). Included in his synopsis was a reiteration of the Advisory Committee's requests from ACM #5, which became the action items from the meeting. The five action items are listed below.

1) Estimate the number of properties that would be adversely impacted by the Holliday alternative.
2) Consider eliminating the "flyover" ramp (westbound CD to I-75 SB).
3) Consider modifying or eliminating the Spring St. interchange.
4) Consider leaving left-hand ingress/egress on I-75 SB (within the I-16/I-75 interchange).
5) Consider aesthetically pleasing structures.

Mr. Buchan explained that the design team had put forth their best effort to address the Advisory Committee's concerns above. He then turned the floor over to Mr. Brad Hale to elaborate more on the design team's efforts to address the Advisory Committee's requests.

Holliday Alternative

Mr. Hale began with a discussion of the Holliday Alternative. A display was provided that showed an estimated right-of-way corridor for this alternative. One of the action items from the previous meeting requested that the design team quantify the property impacts from the Holliday Alternative. The Holliday Alternative involved rerouting I-16 along the proposed path of the

Eisenhower Parkway Extension; therefore, relocating the I-16 / I-75 interchange south along I-75 to the current site of the I-75 / Eisenhower Parkway interchange. Mr. Hale explained that at least 122 buildings would be impacted, including 48 dual-occupancy structures within the Murphy Homes development. Mr. Hale elaborated that this number - 122 buildings - was arrived upon by placing a 300' right-of-way corridor along the existing Eisenhower Parkway. Three hundred feet is the width of the existing right-of-way corridor along I-16. Mr. Hale added that the 122 impacts was a conservative estimate and that there would likely be more impacts. It was also noted that this alternative would have a negative impact to the local traffic network, as it would bisect the area by cutting off many of the streets currently crossing the Eisenhower Parkway. Several of the busier cross streets would have to be reconstructed as overpasses or underpasses. In addition to the impacts to properties and the local traffic network, the Holliday Alternative would increase traffic on I-75 between the existing Eisenhower Pkwy and I-16 interchanges. Mr. Hale noted that this stretch of I-75 would have to be widened to accommodate the additional traffic, requiring the reconstruction of several bridges and causing impacts to Pleasant Hill similar to those currently planned under Alternative #9. Based on these findings, Mr. Hale stated that the Holliday Alternative has been eliminated from further consideration. *(Following the meeting, Mr. Holliday noted that his plan intended for the interstate to be depressed below the local street level with no impacts to either property or the local traffic network. He also noted that he had envisioned a multi-level roundabout for the new I-16/I-75 interchange, again with no additional R/W required.)*

At this point, several of the Advisory Committee members stated their concerns. Ms. Betty Lou Browne pointed out that the Holliday Alternative was popular with the locals because it moved I-16 away from downtown Macon, allowing the area along the riverfront to be further developed into an attractive gateway park. Mr. Daniel Fischer asked if the property impacts from the Holliday Alternative were more or less than those planned under the Eisenhower Extension Project. The design team answered that they could not say for sure, but the impacts from the Holliday Alternative would likely be much greater than those of the Eisenhower Extension Project.

<u>Alternative #10</u>
The design team developed Alternative #10 in an attempt to address the Advisory Committee's concerns from the previous meeting. A large-scale display was provided that depicted a schematic of this alternative on aerial photography. Handouts were also provided to each of the Advisory Committee members. Mr. Hale gave a detailed presentation, in which he described the key features with this alternative and the results of the project teams' traffic analysis. The following are the primary discussion points from this presentation:

- One of the project team's objectives with ALT 10 was to shift some, but not all, traffic from the Spring Street interchange to the Second Street interchange. This was accomplished by making the following changes:

    - Provide access from Second Street directly to I-16 WB.
    - Remove the 'flyover ramp' (WB CD to I-75 SB)
    - Remove the ramp from I-75 NB to Spring Street.

    The above changes would have the following affect on the project:

    - Access to and from Spring Street would be limited to I-75 north of the I-16/I-75 interchange.
    - Southbound traffic on Gray Hwy destined for I-75 SB would need to take Second Street.

- Traffic on I-75 NB destined for Gray Hwy would also be routed through Second Street.
- Increased traffic flow on Second Street would probably require Second Street to be widened, and the intersections at Gray Highway and Emery Highway re-configured.
- The WB CD would no longer need to be elevated above the mainline.
- The overall project footprint along I-16 between the I-16/I-75 interchange and Spring Street would be reduced.

- Another goal with ALT 10 was to minimize impacts to the Pleasant Hill District. The Advisory Committee had requested that the left-hand ingress and egress on I-75 SB not be revised as proposed with ALT 9 for this reason. The left-hand vs. right-hand exit issue, however, is not the primary reason why Alternative 9 impacted Pleasant Hill.

  The proximity of the Hardeman Ave. interchange to the I-16/I-75 interchange coupled with the high traffic volumes on the I-75 mainline creates a complex and unsafe weaving movement. ALT 9 corrected this problem by shifting the I-75 NB / I-16 EB split approximately ¾ mile south and re-configuring the entrance ramp from Hardeman Avenue to I-75 NB to span over the new I-16 EB exit ramp. This configuration, commonly referred to as a 'braided ramp' design, requires the displacement of 10 properties within Pleasant Hill along Middle Street.

  With ALT 10, the design team removed the braided ramp described above and left the existing configuration of I-75 NB between Hardeman Avenue and I-16 alone. The proposed right-hand ingress/egress modification on I-75 SB, however, was retained with ALT 10. This eliminates all but one of the impacted properties in Pleasant Hill, and maintains continuity on the interstate mainline.

- The design team's traffic analysis for ALT 10 yielded the following results:

  - An unacceptable weaving movement (level of service 'F') occurs on I-16 WB between I-75 and Second Street.
  - The traffic model projected an acceptable weaving movement (level of service 'C') on I-16 EB between I-75 and Second Street. However, due to the number of lanes required and poor system-level continuity (all traffic from I-75 SB continuing on I-16 EB must shift over one or more lanes), this configuration is considered undesirable for traffic flow.
  - An unacceptable weaving movement (level of service 'F') occurs on I-75 NB between Hardeman Ave. and I-16.

- Mr. Hale noted that the following conclusions were made following the design team's analysis of alternative #10:

  - There is insufficient distance on I-16 between Second Street and I-75 to safely provide ingress/egress without separating service level from system level movements via CD roads.
  - There is insufficient distance on I-75 between Hardeman Avenue and I-16 to safely provide ingress/egress without either braided ramps or a CD system.
  - The design team recommends that ALT 10 be eliminated from further consideration.

<u>Design Year Traffic</u>

Mr. Hale ended his presentation by mentioning that the design year traffic had been updated from 2025 to 2032 to reflect the updated interchange opening date. Previously, it had been anticipated

that the interchange would be open to traffic in 2005 requiring the traffic to be forecasted to 2025; however, the anticipated completion date has been pushed back to 2012 requiring the traffic to be forecasted to 2032.

Preferred Concept Alternative

Following Mr. Hale's presentation, Mr. Ben Buchan announced that GDOT was planning on moving forward with Alternative #9 through the next phase of the project – the NEPA approval process. GDOT has a responsibility to move the project forward due to the high accident rates and projected future traffic volumes. He stated that the public involvement process would continue and the Department is committed to mitigating project impacts and providing a context sensitive design. The next step would be to schedule meetings with individual neighborhood groups as well as a Public Information Open House and Public Hearing.

Mitigation

Next, Mr. Chris Kingsbury of Moreland Altobelli spoke on the subject of mitigation in the form of landscaping and aesthetics. He showed slides of mitigation examples from other projects including various aesthetic treatments for walls, noise barriers, bridges, and landscaping. He also mentioned the possibility of creating a landscaped park area out of the impacted properties in Pleasant Hill. He stated that the public's input would be instrumental in determining exactly what sort of aesthetic mitigation was incorporated into the project.

Advisory Committee Comments

- Ms. Sandra Bush expressed concern that the money set aside for mitigation would be spent elsewhere on the project. *The design team assured her that there would be money set aside specifically for mitigation.*

- Ms. Bush also requested that the design team incorporate aesthetic elements into the project that reflect Macon's heritage. She specifically mentioned how the roof of the Macon Coliseum mimics the shape of the Ocmulgee Indian Mounds.

- Mr. Sid Cherry expressed concern about construction time and public involvement during the construction process. *The design team informed him that the public would be kept informed throughout the construction process, which would take at least 4 years.*

- Mr. Mike Ford requested that a pedestrian bridge over the Ocmulgee River (adjacent to I-16) be incorporated into the design. *The design team has discussed constructing a bridge to stage traffic temporarily, which could be converted into a pedestrian bridge for the trail upon completion of the permanent interstate bridges.*

- Mr. Brian McDavid requested that no metal sound barriers be used and he expressed interest in improving the railroad bridge over the Ocmulgee River (east of Coliseum Drive) that acts as a dam when it floods.

- Provide good signs for out-of-town drivers.

- Minimize sound impacts to the Ocmulgee National Monument.

- Consider economic impacts to downtown during construction.

- Minimize impacts to the Ocmulgee Heritage Trail during construction.

- Ensure this project has been coordinated with the Eisenhower Parkway Extension.

Next Steps

Mr. Buchan concluded the meeting by explaining the project team's next steps in the design process. Meetings will be conducted with individual neighborhood groups this summer. A Public Information Open-House (PIOH) meeting will probably be held this fall. The environmental document should be completed in one year. A separate PIOH may be held for the Eisenhower parkway Extension project sometime between Fall 2005 and Spring 2006.

ATTACHMENT #8

NEIGHBORHOOD GROUP MEETING MINUTES

I-16 / I-75 Improvements
Local Group Meeting Summary

Date: June 26, 2000

Group: Pleasant Hill Community Group

# of Attendees: 28 sign-ins, however it was noted that several people did not sign-in (see attached)

Summary:
Dr. Robert Williams opened the meeting and expressed his appreciation for the project team attending to inform the community of the project prior to any construction or right of way purchasing. He introduced Mr. Joseph Palladi. Mr. Palladi explained his position with GDOT and began to describe the I-16/I-75 Improvement Project. He provided information on the need and purpose of the project, and explained the public involvement process.

Ms. Liz Sanford facilitated a discussion to determine any needs and concerns on the part of the community related to this project. Specific comments/questions were:

- What is the time frame?
- Prior to construction of I-75 in the 1960's, many residents were not aware of the project until they started to demolish property. What measures will GDOT take to ensure residents are better informed with this project?
- Will there be minority participation in every phase of the project?
- How was the Advisory Committee selected?
- How will the project be phased during construction?
- Who is funding this project and how much will it cost?

Mr. Palladi addressed each of the comments and explained the project in more detail. He discussed the concept maps that were displayed including access from 2nd St. off I-16, signage improvements, braided ramps at Riverside Drive and a half diamond interchange at Riverside Drive. Mr. Palladi asked the group to identify the benefits of this type of interchange to the Pleasant Hill Community. He also asked if there were other interstate improvements that could be made in the area to improve the community. Mr. Palladi explained that the purpose of this meeting was to provide information and to get feedback from the community.

Specific comments included:

- Will this eliminate accidents at Riverside?
- Have the people who are renovating around the stadium been informed?
- Residents need to know more about the impacts as plans progress. (For example, it is the community's understanding that a collector road was discussed during the planning for I-75 but the community didn't want it. Pleasant Hill residents were never asked for their input.)
- The Advisory Committee needs to stay in touch with the community.
- Are any residents from Pleasant Hill on the Advisory Committee? *Mr. Palladi responded that currently there were not any Pleasant Hill residents serving on the Advisory Committee. He then offered to include a Pleasant Hill resident if the group would select someone and send his/her address and phone # to him.*

- Reverend Michael Chambers offered to attend the meetings or to help the group decide on a representative.

Ms. Sanford explained how the current Advisory Committee members were identified and selected. Mr. David Grachen, FHWA, reminded the group that there has been and will be public informational meetings that they all can attend to provide input. Mr. Palladi provided his direct phone number if they want to talk with him directly, 404/656-5446. He also informed the group that Mrs. Angela T. Alexander, his assistant, or Mrs. Genetha Rice-Singleton, Project Manager, could be contacted. He also reminded them of the project hotline number and P.O. Box.

Action Items:

Mr. Palladi offered to add a representative from the Pleasant Hill Community to the Advisory Committee. A letter will be sent to Dr. Williams asking for the name and address of their representative. This person will be invited to the next Advisory Committee meeting in late July. A copy of all previous Advisory Committee meeting materials will be provided to this person for their review prior to the meeting.

Comment Forms:

Seven comment forms were received at the meeting. Three were requesting representation at meetings from Pleasant Hill. One asked how this project will effect Third Avenue and 4th Avenue. The others were requesting to be added to the mailing list. (See attached)

I-16 / I-75 Improvements

Meeting Summary

Shirley Hills Neighborhood Meeting

Tuesday, January 23, 2001

Highland Hills Baptist Church

6:00 p.m.

# of Attendees: Seventy-four (74) names were included on the sign in sheet.

Summary:

Ms. Liz Sanford called the meeting to order with a welcome and review of ground rules.

Ms. Sanford then introduced Mr. Joe Palladi, who briefly discussed the need and purpose of the project, traffic projections, public involvement, and the use of an advisory committee to work with the project design team. Mr. Palladi informed the community that the Department is willing to add a representative from the Shirley Hills Community to the Advisory Committee.

Mr. Brad Hale discussed the preferred concept alternative in detail, outlining the proposed changes to the interstate within the project area. Several questions were raised during Mr. Hale's presentation, and Ms. Sanford asked the audience to hold their questions until after the presentation.

Mr. Todd Hill briefly discussed potential environmental impacts within the project area, noting that 90% of the project area is in the floodplain and that the project area includes wetlands, historic districts, and archeological sites. Mr. Hill then discussed the preliminary noise study results. He indicated that the study compared noise impacts under current conditions to future impacts projected 25 years out, both with the scenario of the project completed and with no improvements made.

This information raised several issues, including questions on what noise walls look like, line of sight issues, and a request for a referral to another project where neighborhoods worked together with the Georgia Department of Transportation (GDOT) to get noise barriers placed to each groups satisfaction.

Mr. Hill and Mr. Palladi responded to these comments/questions by discussing the various types of noise barriers: metal, brick, prefab concrete and landscape berms. Mr. Palladi stated that the purpose of a noise barrier is to reflect noise and that a cost benefit analysis – relating the number of people benefited by the barrier to the cost of erecting the barrier – will need to be completed to determine the feasibility of constructing noise barriers. GDOT's policy of $50,000/ impacted receptor and $25,000/ benefited receptor was also noted.

Mr. Palladi also mentioned that the projects studied and/or reviewed by GDOT must be included in the Metropolitan Planning Organizations (MPO's) plan. Alternatives to this project, such as an eastern by-pass around Macon, cannot be considered unless and until they are part of the MPO's long-range plan.

Ms. Sanford asked once again for the group to hold questions until after Mr. Hill's presentation. Following the end of the presentation, the floor was opened up for questions. The questions and answers are outlined in the appendix attached to this meeting summary.

The meeting was adjourned at 8 p.m.

Questions and Answers

Q.1 Does the noise model discussed take in to account 25 years from now?

A.1 Yes. The model includes traffic and noise projections for the year 2025 with both a build and a no-build conditions.

Q.2 What's up with the train tracks moving to the other side of the river?

A.2 In response to comments at previous public meetings, Moreland Altobelli (GDOT's consultant for the interchange project) studied several alternatives for re-location of the Norfolk Southern RR. This study concluded that re-location of the railroad from the West bank of the river to the East bank would be very expensive, aesthetically unpleasing, and have a negative impact on the floodplain.

While there have been articles in the paper and it is widely known that NewTown Macon is looking for ways to create a waterfront in Macon, there is no commitment by GDOT, nor written word by the railroad companies, the Governor or any other state agency indicating a commitment to do something with the rail line.

Comment by Conie Mac Darnell, Advisory Committee Member, representing NewTown Macon: Please don't make up your mind on the relocation of the railroad based on the absence of information. We'll have one chance to create a waterfront for Macon, and this is it. We will have more information on the possibility of relocating the rail within the next 60 days. Please don't make up your mind before then.

Q.3 Will any property be taken by this project?

A.3 Currently, there are no residential displacements anticipated by this project. There is possibly one commercial displacement – a car dealership.

Q.3.a The interstate is already 300 feet from my house. How much closer will it be with this project?

A.3.a Approximately 70 –75 feet closer.

Q.4 Can we look at the elevations for this project?

A.4 Yes, but our maps won't extend into the neighborhood; they will show the elevation at the project and immediately adjacent area only. You will have to get a topographical map of the neighborhood. I can't provide maps to everyone – please have one person from your neighborhood request the map.

Q.5 You stated you've worked with Caution Macon. As an officer of Caution Macon, we have not approved or disapproved of anything. We've only said you need to have public feedback throughout this process.

A.5 I was not speaking for Caution Macon, but that we have included a member of Caution Macon on our Advisory Committee. That individual is responsible for relaying information between the Committee and Caution Macon.

Q.6 Getting back to the $50,000 per impacted home and the fact that noise walls are not to be more that 30 feet high. Will that help us? Do we have enough homes to meet those criteria?

A.6 We have made exceptions on the 30-foot wall height – and have built noise barriers as high as 38 feet. We will have to wait to see the results of the study before we can comment on whether you have enough impacted homes to meet the $50,000 criteria. The final study will be completed in about 6 weeks. We will have an advisory committee meeting and a public hearing after the study is complete. Also, we will be happy to come back out to the neighborhoods.

Mr. Palladi gave his phone number, e-mail address and introduced Angela Alexander and Genetha Rice-Singleton at this point. He stated that the DOT wants public input, and uses it once it is received.

Q.7 It appears that the plan calls for 6 bridges over the Ocmulgee River vs. the 2 current bridges. Is this the case?

A.7 Yes. The 6 proposed bridges are necessary to accommodate I-16 and the proposed collector- distributor (CD) roads, which will parallel I-16. The proposed Westbound CD Bridge will be approximately 60 feet closer to the Shirley Hills neighborhood than the existing I-16 Bridge.

Q.8 What are the types of noise barriers?

A.8 There are many types. Steel barriers are the most cost effective. There are also concrete barriers that can be more decorative, and landscape berms. We are committed to looking at different alternatives in an attempt to find something aesthetically pleasing.

Q8.a What will it take to get the type we want?

A.8.a It depends on a number of factors, including the distance from the area needing the barrier and the highway. Also, it depends on where you want to put your money. You could use a less expensive barrier and use other funds to cover with landscaping – or use a more expensive type of wall.

Q.8.b Who decides if the neighborhood is affected?

A.8.b Ultimately it comes down to the results of the environmental study and the Federal Highway Administration.

Q.9 Can the North Highlands Neighborhood add a representative to the Advisory Committee?

A.9 Yes.

Q.10 What about traffic eastbound on I-16 following events at the Centerplex?

A.10 The Centreplex has a representative on the Advisory Committee, and we are working with them to alleviate the congestion problems following large events. Improvements include: opening 2nd Street as a full access interchange; opening CD roads to offer additional access; possibility of providing a back entrance/ exit to the Centreplex parking lot.

Q.11 What about making 2nd Street the main exit off I-16 as opposed to Spring?

A.11 At issue is a way to cross the River. We intend to treat the whole project as a gateway into Macon as opposed to specific exits.

Q.12 Why are you designing at 55 MPH?

A.12 We design for the posted speed limit. Design and enforcement speeds are not always related. The road will be designed for safety purposes in accordance with the standard speed limits for metropolitan areas throughout the United States.

Q.13 Concerning the railroad, have you considered tunneling, like in Norfolk, VA?

A13 No. It is an engineering issue. It is not feasible to take a train from under the river up to ground level at the Macon's terminal station.

Q.14 Regarding noise abatement. Have you looked at any new products?

A.14 We are constantly looking for new materials and products, but I know of no new products for absorptive barriers. Only two known products serve as absorptive barriers – steel wool and asbestos. Steel wool rusts and disappears, and no one wants asbestos.

Q.15 Do the noise models anticipate future growth and traffic?

A.15 Yes.

Q.15.a Have you run a model of 25 years with "No- Build"

A.15.a Yes. Todd pointed out the impacted area for the no-build option on the project display.

Q.16 Where are you taking the readings? Are you below road elevation?

A.16 We take the readings as close to the interstate as possible; some points are lower than the road, some are higher. The model, however, does have the ability to compensate for topographical and elevation variables.

Q.16.a Can you consider the homes higher up on the hills – I hear the traffic mainly from my upstairs bedroom.

A.16.a Yes, we can take readings from the hilltops.

Q.17 Has a quality of life study been conducted to identify community impacts?

A.17 Quality of life is very difficult to measure. A community impact study is underway, which looks at measures such as connectivity of neighborhoods and commercial districts, community cohesion, and access.

Q.18 Regarding the 70 decibel methodologies, are these averages, taken during the day or night? What about the quality of life relating to noise? When can we see this study?

A18 The readings reflect averages of peak and off peak travel. The quality of life study includes all factors – from noise and environmental impacts to safer roads

& better connectivity. The study should be completed in late spring or early summer.

Q.19 What if they decide to move the railroad? Won't that substantially change this project and become a whole different study?

A.19 Yes.

Q.20 Without any complicating circumstances, what will be the duration of the Project?

A.20 This project will take 5 –7 seven years to complete. That includes our assumption of maintaining all existing lanes during construction.

Comment: This project is needed immediately. People are dying due to bad signage and something must be done before 5-7 years. It's too dangerous out there and GDOT knows that.

Mr. Palladi responded that he would relay the signage comments to GDOT's maintenance office.

I-16/I-75 Improvements

Meeting Summary
Pleasant Hill Neighborhood Meeting
Monday, January 29, 2001
Booker T. Washington Community Center
5:00 p.m.

Summary:

The I-16/I-75 Improvement Project Staff Presentation was an agenda item on the regularly scheduled Pleasant Hill Neighborhood Association meeting. Approximately 38 people attended the meeting. The presentation was number five out of the eight agenda items. However, the neighborhood association moderator invited the project team to present as the first agenda item.

Before the meeting, Ms. Cheryl Dilworth of Sycamore Consulting spoke with some of the attendees one-on-one to offer a copy of the latest I-16/I-75 newsletter and ask if they would like to be added to the mailing list. Four people were added to the mailing list in this way.

The Pleasant Hill Neighborhood Association Meeting moderator called the meeting to order. He then asked Mr. Bob Enesley to introduce the I-16/I-75 Project Team. Mr. Enesley is a member of the Pleasant Hill community and serves on the I-16/I-75 Interchange Improvements Advisory Committee. Mr. Enesley explained his role on the Advisory Committee and stated that he was pleased with the preferred alternative to be presented by GDOT. The only impact that he expects would be to a drainage ditch parallel to the interstate. He said that he believes this will be an improvement to the existing condition of the drainage ditch. He then introduced Ms. Liz Sanford, Public Involvement Consultant.

Ms. Liz Sanford thanked the neighborhood association for the opportunity to present the preferred project alternative and introduced Mrs. Angela Alexander, Assistant State Urban Design Engineer, GDOT. Mrs. Alexander said that we were returning to the community to address some of the concerns of the previous Pleasant Hill neighborhood meeting. She noted that as a result of the last meeting, Mr. Enesley was invited to be a member of the Advisory Committee. She stated that the purpose of this visit was to keep residents updated as the project progressed, a request from a previous Pleasant Hill meeting. Mrs. Alexander stressed the importance of public involvement in this project. She then introduced Mr. Brad Hale, Consultant Team Project Manager.

Mr. Hale discussed the preferred concept alternative in detail, outlining the proposed changes to the interstate within the project area. Of special interest to the Pleasant Hill Neighborhood, he pointed out that the project would have very little impact on their

neighborhood. Currently, the project will end construction along I-75 at the Walnut Street overpass.

During and after this explanation by Mr. Hale, several questions were raised. The questions and answers are outlined in the appendix attached to this meeting summary.

Mr. Hale and Mrs. Alexander answered questions. Once all questions were answered, Ms. Sanford informed attendees that recent I-16/I-75 project newsletters were available. She added that there is a project specific toll free number listed on the back of the newsletter and to please call if they would like to be added to the mailing list.

Questions and Answers

Q1. How close will the impact be to the fence line of the Linwood Cemetery?

A1. The edge of the proposed pavement will be 190 feet from the cemetery fence (15 Feet closer than the existing edge of pavement).

Q2. My main concern is about GDOT coming through this neighborhood like they did before (in the 1960's) when bulldozers just showed up one day. It always seems like the black neighborhoods have to be divided by roads. Traffic comes through the black neighborhoods. I am concerned about increased traffic.

A2. That is why we are here, to keep you informed of what is going on and to get your feedback. The project is geared toward the traffic on the interstate. There will be minimal work, if any, inside the neighborhood.

Q3. I am concerned about the project coming within 15 feet from the cemetery.

A3. The project is only being extended 15 feet from the current edge of pavement, but will not be within 15 feet of the cemetery. (*Showed diagram*) A barrier wall will be added. That way, we can stay out of the ditch area and will have the least. amount of impact.

Q4. Are you aware that there is a cave right where you are talking about putting that barrier?

A4. That is why these meetings are so helpful. We find out so many things from you because you are familiar with the area. Could you show us where the cave is on our map? (*Residents showed area of cave on project map*) It looks like it is on the back slope of the ditch, and will not be impacted. Our archeologists will be very interested in finding out about this. Thank you.

Q5. Traffic is very dangerous at the intersection of I-16 and I-75. Are you going to do anything about this?

A5. Yes. This project attempts to fix the interchange at I-16 and I-75 (*Showed preferred project map and explained the lane change process*).

Q6. Will this project do anything to relieve traffic?

A6. Yes. That is one of the purposes of this project. Traffic forecasts were considered for now and for 20 years into the future. So, this plan will accommodate traffic for the next 20 years.

Q7. When will you begin construction?

A7. 2003, 2004 and 2005, depending on which portion of the project construction at Coliseum Drive will commence in 2003.

Q8. Will this project have any affect on Forrest Avenue and Riverside Drive?

A8. No impact.

Q9. What about 3rd Avenue?

A9. It is not within the scope of the project. No impact.

Q10. What about the Spring Street exit?

A10. Yes, there will be improvements. The addition of collector distributor (CD) roads along I-16 will greatly facilitate traffic to and from Spring Street. In addition, Eastbound access to 2nd Street from I-16 will relieve some of the traffic burden from Spring Street.

I-16 / I-75 Improvements
Meeting Summary
Shirley Hills / North Highland Community Meeting
Thursday, February 7, 2002
Vineville United Methodist Church
6:00 p.m.

# of Attendees: Twenty four (24) names were included on the sign in sheet.

Summary: Ms. Liz Sanford, Consultant Facilitator, called the meeting to order with a welcome and review of ground rules and agenda. Ms. Sanford thanked Mr. Brian McDavid for his help in organizing the meeting.

Ms. Sanford then introduced Mrs. Angela Alexander. Mrs. Alexander stated that she was the Assistant State Urban Design Engineer, and that she would be speaking on behalf of Mr. Joe Palladi, the State Urban Design Engineer, who was unable to attend the meeting. Mrs. Alexander indicated that it is the goal of the Department to keep the community involved in the interstate improvement process. She thanked Mr. McDavid and the rest of the meeting participants for their interest and involvement.

Following self-introductions, Mrs. Alexander gave a brief synopsis of project activities since the last community meeting at Shirley Hills, which was held in January 2001. Project activities included a railroad relocation study, a traffic study, hydrology study, noise and air study, and submittal of the draft environmental document that is currently under review by GDOT Office of Environment and Location. Mrs. Alexander noted that the primary design improvements had been delayed while New Town Macon and local officials discussed and evaluated the merits of relocating the railroad. The railroad issue was finally resolved in a meeting with the Mayor, New Town Macon and other local government officials in November 2001.

Mrs. Alexander then introduced Mr. Brad Hale, Consultant Project Manager. Mr. Hale defined the project area, referenced a handout detailing traffic and accident data in the project area, and discussed the project's proposed improvements and alignments. Major points discussed relating to the concept include:

- I-75 from I-16 to Pierce Avenue
    - Widening I-75 from four to eight lanes.
    - 12-foot shoulders with concrete median barrier.
    - Most work will be done within existing median.
    - Existing lanes will remain open during construction.
    - Proposed widening is within existing right-of-way.
    - Construction easements will be required.

- I-16/I-75 Interchange Configuration
    - Proposed configuration of interchange similar to existing configuration.

- Several existing ramps will be widened and/or re-aligned to improve operational problems.
- At it's highest point, the C-D flyover ramp will be approximately 25 feet higher than the existing interstate ramp.

- I-16 from I-75 to Coliseum Drive
  - I-16 will be widened from Four to Six lanes.
  - C-D roads with up to three lanes will be constructed to provide access to Spring Street, Second Street, and Coliseum Drive while maintaining safety and improving operational efficiency.
  - The westbound C-D will be approximately 60 feet closer to the Shirley Hills neighborhood than the existing interstate pavement. No additional right-of-way will be necessary at this location.
  - Ingress/Egress will be provided from eastbound I-16 to Second Street.
  - The Coliseum Drive Bridge over the Ocmulgee River will be widened and reconstructed. The new bridge will include ten-foot sidewalks on both sides and will be elevated above the 100-year flood.

Throughout the presentation there were comments and questions from attendees. These notes were mostly related to the need and purpose of the project, especially if other alternate projects in the Macon area are undertaken. Mr. Hale explained that many of the comments were most appropriate to the Macon area planning process. Mr. Hale stated that traffic volumes and accident data support the need for improvements to this corridor. This section of interstate is characterized by heavy commuter traffic and ingress/egress problems at multiple interchanges.

Several subsequent questions pertained to the proposed Fall Line Freeway and its impact on the need for this project. Mr. Hale responded that the Fall Line Freeway would not address the traffic and operational problems at this location.

Mr. Todd Hill, Consultant Environmental Manager, was then asked to present potential environmental impacts. Mr. Hill stated that GDOT is currently reviewing the draft Environmental Assessment (EA) report. Mr. Hill explained that an EA and an EIS require the same environmental studies. Based on the studies completed for this project, the environmental impacts identified do not appear to be significant. As such, the Department believes that an EA will be sufficient for this project.

In response to a question about interagency coordination and existing local projects, Mr. Hill noted that the EA looks closely at potential impacts to the planned park. He further noted that coordination efforts between the park planners and the project team have been substantial.

Mr. Hill then explained the noise impact study that had been conducted. The study includes an assessment of existing and future conditions. For the future condition, both build and no-build options were studied for year 2025 projections. Noise mitigation is triggered by two potential scenarios: 1) A decibel level of 69 or higher; or 2) an increase

of 10 decibels or more. The study indicates a noise wall is warranted due to multiple readings in the Shirley Hills community that currently exceed 69 decibels. The study also indicates that with the noise walls in place, residents will have less noise 20 years from now than they do today.

Based on the formula for determining funding, the area will be allotted approximately $1.5 million for construction of noise walls. Noise walls come in two types – absorptive and reflective. Absorptive walls absorb sound, and reflective walls reflect sound up and away. Both types are effective. It was noted that reflecting the sound is an effective method for reducing noise because distance equals dissipation. Mr. Hill discussed the shadow of the noise wall and stated that noise impacts will not occur outside the shadow zone of a noise barrier.

Mr. Hill then presented a slide show to illustrate the various types of noise walls available. He presented the standard metal wall with landscaping, and more decorative types of noise barriers such as poured concrete and brick. Mrs. Alexander indicated that the Department would work with the I-16/I-75 Project Citizens Advisory Committee to determine noise abatement that meets Federal guidelines and the needs of the community.

Ms. Sanford then commenced the designated question and answer portion of the meeting. She asked for questions from the floor:

Q1 What are the speed limits on the interchange?
A1 *C-D Roads are 45 mph; mainline interstate is 55 mph.*

Q2 If speed limits were enforced, what would happen to accident rates?
A2 *It is hard to say. Accident data does not specify which accidents were caused by excessive speed. The proposed improvements will increase operational performance and reduce accidents.*

Q3 Why do we have to keep building more roads to meet projected traffic?
A3 *Capacity analysis and traffic projections show us that these improvements are necessary to meet an acceptable level of service and to improve/maintain accessibility.*

Q4 Did a by-pass around Macon ever get considered?
A4 *This project was initiated in Macon by the local Metropolitan Planning Organization (MPO). The local MPO analyzed alternatives and identified priorities. To get more background on the planning process, contact your local MPO for more information on concept alternatives considered.*

Q5 Who is on the Advisory Committee? How did they get appointed?
A5. *(Membership listing announced). CAC members were identified through numerous interviews with Macon area stakeholders and are representative of various points of view and special interests.*

Throughout the meeting there was an on-going discussion relating to the type of traffic found on the interstate system in Macon (i.e. truck traffic, through traffic (Savannah to Atlanta, Florida to Atlanta), or local commuter traffic) and how traffic gets to the interstate (i.e. Gray Highway, Emery Highway, 2nd Street, Spring Street, and 5th Street). Ms. Sanford asked for confirmation of her impression that meeting participants believed these larger transportation planning issues had not yet been fully addressed. Mr. Hale explained that we are looking at how many cars will be in the corridor in 20 years, while working to reduce accidents and improve operations for present conditions. Mr. Hale also indicated that all trips beginning or ending in Macon are considered to be local traffic.

Q6 What is the impact of the height of the wall on decibel levels?

A6 The computer model looks at present, future build, and future no build. The model is able to predict sound levels and factor in the most effective/appropriate wall height.

Q7. Will the Environmental Assessment (EA) take into consideration impacts on the River?

A7. YES.

Q8. I am concerned about the sound and unsightliness of the proposed bridge. Is there anyway to not have the flyover?

A8. The elevated CD's are necessary to eliminate the weave problems, to meet future traffic projections, and to maintain access to the interstate.

Ms. Sanford called on Mrs. Alexander to discuss the next steps. Mrs. Alexander stated that the Citizens Advisory Committee would meet before the Public Hearing for the project, which will most likely be in the late summer or early fall. A newsletter will be distributed before the Public Hearing. Mrs. Alexander also asked the meeting attendees to call her if they had questions or concerns.

Mr. Brian McDavid thanked everyone for coming and stated that the community needs to work with the local MPO staff to deal with local transportation planning issues.

The meeting was adjourned.

I-16/I-75 Interchange Improvement Project and
I-75 – Pierce Avenue to Arkwright Road Project
Local Group Meeting Summary
Winship Hills, Northwoods, Riverview Neighborhoods
Wednesday, February 27, 2002
6:00 p.m.

# of attendees: 20

GDOT Representatives and Consultants Present
Angela Alexander, Georgia DOT
Genetha Rice-Singleton, Georgia DOT
Marlo Clowers, Georgia DOT
David Acree, Georgia DOT
Lisa Walker, Georgia DOT
Andrew Aiello, Georgia DOT
Josh Graegorzowski, FHWA
Brad Hale, MAAI
Todd Hill, MAAI
Taylor Wright, PBS&J
Ron Morris, PBS&J
Denny Meier, PBS&J
Wendy Cullens, PBS&J

Introduction
Ms. Liz Sanford of Sycamore Consulting opened the meeting with an agenda and ground rules. Meeting participants were requested to hold any questions until after all presentations were complete. Ms. Sanford then introduced Mrs. Angela Alexander, Assistant State Urban Design Engineer for the Georgia Department of Transportation.

Overview of the Projects
Mrs. Alexander thanked the group for taking the time to participate in this meeting and for allowing the Department the opportunity to come out and discuss the design and environmental work being done for improvements on I-75 and I-16. Mrs. Alexander explained that there are two separate projects to be discussed tonight, the I-16/I-75 Interchange Improvement Project and the I-75 widening from Pierce Avenue to Arkwright Road. Mrs. Alexander stated that while these are two separate projects, the design teams are working together to ensure a smooth convergence of the projects.

Mrs. Alexander gave a brief overview of each project, including a description of the public involvement methods used. Mrs. Alexander stated that both projects are fairly well along into the concept validation phase.

I-16/I-75 Interchange Improvement Project

Mr. Brad Hale of Moreland Altobelli Associates discussed the I-16/I-75 Interchange Improvement Project. Mr. Hale reiterated that a Citizen Advisory Committee (CAC) was utilized during development of the preferred concept alternative. The CAC reviewed and evaluated seven alternatives in their evaluation screening process.

Mr. Hale stated that the improvements to the interchange will be substantial. The primary objective of the project is to improve the operational efficiency of the interchanges in the project corridor. Current problems include short weaving distances, limited sight distances, and minimal space between interchanges. Mr. Hale then described the proposed improvements outlined in the preferred concept alternative.

Following Mr. Hale's presentation, the following questions were asked:

Q: Is the concept cast in stone?
A: No. The project is still in the concept validation phase.

Q: How will Riverside Drive be affected by the widening of I-75?
A: Riverside Drive may need to be shifted approximately three feet to the west for a short distance (approximately 900 feet). This would be necessary to avoid impacting the Corbin Avenue sanitary sewer pump station located on the east side of I-75.

Mr. Hale explained that this project is still in the concept validation stage and the purpose of this and other meetings is to provide information to the community and to get input on the concept.

I-75– Pierce Avenue to Arkwright Road Project

Mr. Taylor Wright of PBS&J gave an overview of the improvements proposed by the I-75 widening project from Pierce Avenue to Arkwright Road. Mr. Wright stated that this project begins 1500 ft. south of Riverside Drive and that the profile of I-75 will have to be raised to lift it out of flood impact elevations and to provide vertical clearance at Red Oak Drive and Arkwright Road. Additionally, Mr. Wright pointed out locations for proposed noise abatement along the east side of I-75.

Mr. Wright also described the proposed improvements to Riverside Drive between Arkwright Road and Pierce Avenue.

Environmental Studies

Mr. Todd Hill of Moreland Altobelli Associates indicated that there were nine environmentally sensitive areas within the project boundaries and that the project team has worked to protect these areas and/or minimize any potential impacts. Mr. Hill also indicated that the entire project is within the floodplain of the Ocmulgee River. This is an issue that requires additional study and mitigation. Mr. Hill stated that the draft

Environmental Assessment document is currently being reviewed by GDOT prior to submittal to FHWA.

Mr. Hill addressed concerns relating to noise impacts in the Winship Hills neighborhood. In general, residents stated that there are existing noise problems in the area. They voiced concerns that the noise study conducted for the I-16/I-75 Interchange Improvement project appeared to overlook existing problems. Mrs. Alexander indicated that the noise impact analysis procedure is based on very specific federal guidelines. Mr. Hill noted that GDOT's guidelines for determining noise impacts are stricter than FHWA guidelines. GDOT and Mr. Hill agreed to return to the neighborhood and take additional noise readings.

Mr. Lee Martin, a member of Caution Macon, stated that a new federal standard requires that sudden changes in noise levels, regardless of decibel level, have to be addressed. No one from either project team had any knowledge of the new standard. The possibility of FHWA using a different standard to determine nighttime noise impacts was also discussed.

<u>Questions and Comments</u>
Residents' comments and questions are noted below:

- Information was requested concerning the scale used in measuring noise.
  Mr. Hill explained that noise is measured in decibels, which is on a logarithmic scale. Since a logarithmic scale is non-linear, an increase of a few decibels can, in some cases, correspond to a doubling in noise levels.

- If Riverside Drive is moved, will there be room for a noise barrier?
  Mr. Hale stated that there would be room for a noise barrier, however all noise abatement must meet Federal & State guidelines and justifications.

- Does the noise impact model include sensitivity analysis at different speeds of traffic?
  Mr. Hill stated that he could and would run sensitivity analysis at different speeds.

- Accuracy of existing traffic volumes, truck percentages, and projected traffic volumes were questioned.
  Mr. Hill responded that the traffic volumes and truck percentages are based on information taken by 24-hour tube counts over a seven-day period. The tube counts distinguish between trucks and passenger vehicles.

- Will the homes on the hill above the interstate benefit from a noise wall on the interstate below?
  Property owners situated at an elevation above the top of a noise barrier would not notice substantial noise reduction.

- Was a Macon Bypass ever considered?
  Mr. Hale and Mrs. Alexander explained that this question was addressed in the Macon planning process, which is spearheaded by the Metropolitan Planning Organization (MPO). Priorities are determined during the MPO process. Mr. Hale stated that the primary purpose of the I-16/I-75 project is to improve safety and traffic flow by correcting operational deficiencies.

- How will this project affect air pollution?
  The air quality study for this project has determined that projected CO emissions (year 2025) within the proposed project corridor would be well below maximum levels as established by the EPA.

- Are there specific environmental regulations relating to interstate projects that don't apply to other federal aid projects?
  No.

- Is there a possibility of getting a noise wall at a later time if it is not included in this project initially?
  Yes. As with all projects, a noise wall project would have to go through the MPO process first and would also have to meet the specific federal guidelines indicating a need for a noise barrier.

- The Citizen Advisory Committee for the Pierce Avenue/Arkwright Road project voted for a different alternative than was chosen by GDOT.
  The CAC process has worked well for the Department, but the recommendations made by the various project CAC's are advisory in nature and are taken to GDOT management as recommendations. The Pierce Avenue/Arkwright Road CAC did recommend a different alternative by a 9-7 margin. Following a cost benefit analysis of the alternative recommended by the CAC, a determination was made that the added benefits did not warrant the added costs associated with the preferred concept alternative. As such, the Department recommended proceeding with the CAC's second choice.

Conclusion

Ms. Sanford indicated that the project team would be available to answer questions around the displays, and thanked everyone for their participation. Mrs. Alexander added that attendees would be placed on the project mailing list and would be notified of future public involvement opportunities through the project newsletter.

FHWA-Upshaw Meeting Minutes
November 19, 2002

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 11:30 AM
Location: GDOT Macon Area Engineer's Office

Attendees:

Ms. Katy Allen	FHWA
Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mrs. Genetha Rice-Singleton	GDOT- Urban Design Project Manager
Ms. Marlo Clowers	GDOT- Urban Design
Mr. Richard Williams	GDOT- Environmental
Mr. Andrew Aiello	GDOT- Environmental
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager
Mr. Spooner Phillips	Moreland Altobelli- Environmental Manager
Mrs. Charlotte Hankins Weber	Moreland Altobelli- Historic/Cultural Resources
Mr. Rob Whitesides	Moreland Altobelli- Noise Analysis
Mr. M. J. Sheehan	Moreland Altobelli- Highway Design
Dr. James Upshaw	Shirley Hills Resident
Mrs. Amanda Upshaw	Shirley Hills Resident
Mr. Rich Hutto	Shirley Hills / Rose Hill
Mr. Jim Barfield	Historic Rose Hill Cemetery Foundation
Mr. James H. Webb	Macon Heritage Foundation
Mr. Steve Bell	Macon Heritage Foundation
Mr. Brian McDavid	3 W. Jackson Springs Road
Mr. Terry McCullough	1045 Blvd. (Resident)

Purpose: Dr. Upshaw, a representative of the Shirley Hills / N. Highlands neighborhoods and president of the Macon Heritage Foundation, requested a meeting through FHWA to review the proposed I-16/I-75 improvements.

Meeting Highlights

The following are highlights from the above referenced meeting. Unless otherwise noted, individual statements outlined in this document are not exact transcriptions from the meeting and under no circumstances should be referenced as such in any other document.

The meeting was opened with Dr. Upshaw stating the following:

- Residents of the Shirley Hills and North Highlands neighborhoods do not believe that potential impacts to their community were fully considered in GDOT's current design. They are concerned about the noise and visual impacts that would result from the increased number of lanes and increased height of the proposed bridges. Their goal is to diminish these impacts.

- Residents of Shirley Hills and North Highlands communities feel that they were excluded from the concept development process. The proposed design was presented to them with no opportunity for comments or suggestions.
- The proposed Ocmulgee Heritage Trail would be visually impacted by the increased number of bridges.
- Residents question the necessity of the proposed improvements and the possibility of alternate routes. They also question whether the traffic projections for the I-16/I-75 interchange project take into consideration the proposed Eisenhower Parkway? *The project team responded that changes in traffic patterns and traffic volumes as a result of projects included in the Regional Transportation Improvement Plan (RTIP), including the proposed Eisenhower Parkway Extension, have been incorporated into the traffic model for the I-16/I-75 interchange improvement project.*
- Dr. Upshaw noted that Joseph Passonneau's rail study alternative showed a reduced number of proposed bridges and ramps within the I-16/I-75 interchange.
- Dr. Upshaw asked for clarification of the Federal oversight on this project.

Ms. Katy Allen of FHWA stated the following:

- As a federally funded interstate project, the I-16/I-75 improvements receive full Federal oversight.
- The draft environmental assessment (EA) for this project has been submitted to FHWA and is currently under review by Ms. Allen.
- Approval of the draft EA allows a project to go to public hearing but does not constitute a final approval of the design.
- The environmental process includes identifying resources, determining potential impacts, analyzing alternatives to avoid or minimize impacts, and documenting public input. All public comments, responses, and summaries from public meetings have been included in the draft EA and will be considered during FHWA's review.

It was suggested by FHWA that the consultant and GDOT staff address Dr. Upshaw's issues listed above.

Mrs. Angela Alexander of GDOT indicated the following:

- Public involvement on the I-16/I-75 project has been extensive including an advisory committee, community group meetings, two public information meetings, a project website, and newsletters being utilized to involve the community early in the process.
- The proposed lane configurations in the project concept serve a specific purpose. Additional travel lanes are often required to improve the operational efficiency and safety of the roadway, in addition to adding capacity.
- The need for improvements to the I-16/I-75 interchange was initially determined by the Macon-area local Metropolitan Planning Organization (MPO). Alternate transportation routes instead of improvements to the existing interchange were

reviewed and eliminated, by the local MPO, during the "planning" phase. The current proposed design is subject to changes within the project corridor.

Mr. Brad Hale of Moreland Altobelli Associates, Inc. gave a brief explanation of the current design:

- Seven concept alternatives were analyzed for the I-16/I-75 project. The initial concept layout proposed a less compact interchange, with ramps physically impacting properties within the Shirley Hills neighborhood. In the preferred concept alternative, the westbound C-D bridge over the Ocmulgee River is proposed to be constructed 5 to 7 feet higher than in the initial concept. It was determined that an increased visual impact would be more desirable than the physical impact incurred with the initial concept.
- The proposed roadways and bridges have been designed at the lowest elevation possible without conflicting with the floodwaters of the Ocmulgee River. (State and Federal guidelines require that all proposed bridge structures be constructed at least one foot above the 100-year flood elevation of the river.) The proposed bridges over roadways must allow minimum vertical clearance for vehicular traffic underneath.
- Efforts have been made to minimize the construction proposed by this project. The initial concept included widening I-75 between Hardeman Avenue and I-16, and constructing C-D roads that extended along I-16 east of Coliseum Drive (through the Ocmulgee National Monument). These improvements were re-evaluated and eliminated during the concept development phase.
- The proposed I-16 C-D roads are necessary to provide safe access to and from Spring Street, Second Street and Coliseum Drive. The additional bridges and ramps within the I-16/I-75 interchange are required to provide access to I-75 from the proposed I-16 C-D roads.
- The roadway modifications proposed by the Passonneau study were vertical alignment changes, including elevating Spring Street and lowering I-16. The Passonneau plan would require elevating the ramps within the I-16/I-75 interchange to accommodate the re-aligned Norfolk Southern Railroad. The Passonneau study did not address the proposed lane or ramp configurations in the preferred concept.
- Diverting traffic from Spring Street to Second Street would not eliminate the need for a westbound C-D road and flyover ramp.

Moreland-Altobelli environmental staff commented as follows:

- Input from Shirley Hills must be balanced with needs of the traveling public, the City of Macon and others. For example, while residents of Shirley Hills may desire alternate transportation routes instead of improvements to the existing interchange, other citizens of Macon support improvements to the existing interstate system to lessen the need for local widening and new location projects.
- While noise and visual impacts may remain, the preferred concept alternative avoids physical impacts (right of way take) to Shirley Hills.

- Residents of Shirley Hills may request elimination of the proposed sound barriers if the increased visual impact is more of a concern than the noise impact.
- Lighting, landscaping, and other aesthetic features have not been developed at this stage, but will be discussed with the Advisory Committee.

The meeting was closed with Dr. Upshaw re-stating each group's position and confirming that there was mutual understanding of the positions.

- The Shirley Hills community would like further reduction in the scale of the proposed interchange construction.

- The GDOT project team maintains that the proposed improvements are necessary to accommodate projected traffic volumes and to improve safety.

After the meeting, several GDOT, Moreland-Altobelli and FHWA personnel visited Dr. Upshaw's property, at his request, to observe the potential visual and noise impacts to the community.

Questions and Comments
Pleasant Hill Neighborhood Meeting
November 21, 2005
Booker T. Washington Community Center
391 Monroe Street
Macon, GA
5:30 p.m.

Project Team Attendees
Ben Buchan, GDOT
Glenn Bowman, GDOT
Brad Hale, MAAI
Patrick Smeeton, MAAI
Liz Stepp, Sycamore Consulting
Leah Vaughan, Sycamore Consulting

Meeting Overview:
The meeting was attended by approximately 70- 75 residents, business owners or concerned citizens

The meeting was called order by Ms. Liz Stepp of Sycamore Consulting. Ms. Stepp welcomed everyone, reviewed the agenda and ground rules, and introduced Mr. Ben Buchan, Georgia DOT's State Urban Design Engineer.

Mr. Buchan briefly reviewed the project's purpose and need, its history and provided a recap of issues raised at earlier meetings with Pleasant Hill.

Mr. Buchan called on Mr. Brad Hale of Moreland-Altobelli to detail the proposed project improvements. Mr. Hale presented improvements along the entire project and in Pleasant Hill. Mr. Hale asked for questions.

Q: In lay terms can you explain what areas you are coming in to? Where is the cemetery impacted? And what homes are impacted?

A. *Most work is contained within the existing right of way on the west side of the interstate. There are no property impacts to Linwood Cemetery. There is one proposed residential displacement on the west side of I-75; it's the last house on 4th Avenue. On the east side of I-75 there are a number of potential displacements, ranging from 14 to 20. The purpose of tonight's meeting is to explain the potential impacts to this community based on Alternative #9 and to listen to the concerns*.

Q. Will there be a road coming from Middle Street all the way through?

A. *The project team has investigated options for a new roadway overpass at either First Avenue, Second Avenue, or Fourth Avenue. Due to the existing topography, adding a new overpass at any of these locations would have undesirable impacts to adjacent property. (A graphic depiction of each option was provided in the presentation).*

Q. How much time do Pleasant Hill residents have to formulate an opinion?

A. *The next major step in the project is to draft the environmental document. In order to meet our current schedule, it would be desirable to receive all input from the community within the next 4 to 6 months.*

Q. How long has this been on the drawing board? We don't feel we have been allowed to participate until now.

A. *The project has been around since the 1980's. This alternative was selected as the new preferred concept alternative (by GDOT and FHWA) in the summer of 2005. You are actually the first community that we have held a discussion with concerning Alternative #9.*

C It seems that Pleasant Hill is always the last to know anything. What about aesthetics, displacements, relocations? Where are these people going to be displaced to? How are residents going to get around? 80% of people in Pleasant Hill are elderly.

Q. When you say "pre-final" on this plan, what do you mean?

A. *We are in the preliminary design process. FHWA and GDOT have both agreed to move forward with this alternative. We are inviting public participation and comment on refinement and mitigation issues.*

C. Environmental Assessment protections are miniscule compared to an EIS. This project demands and EIS.

A. *There are several degrees of environmental assessment. FHWA determines the level of assessment required. At this point an Environmental Assessment appears to be the level required at this time. It is also important to note that after an EA is prepared the level of assessment could be increased depending on the impacts.*

C. There are several issues that Pleasant Hill residents are concerned about: Impacts to Rodney M. Davis grave site and Little Richard's Home site on Middle Street.

Q. Why is there no court reporter? No comment form?

A. *This was intended to be an informal meeting to gather input from the Pleasant Hill Residents. A formal Public Information Open House (PIOH) meeting will be held with court reporters and comment forms.*

Q. How are you quantifying what is said here tonight?

A. *We have several people taking notes. We will prepare a meeting summary that will be included in the project documentation.*

Q. What are the other alternatives? Why was Alternative 9 chosen over the others?

A. *The other alternatives included a wide range of options. We worked with a Citizens Advisory Committee to help us understand the overall concerns. We can provide you with more detailed information after the meeting and it is also on our web site, but we wanted this time to primarily hear your concerns*.

Q. Who represents Pleasant Hill on the Citizens Advisory Committee?

A. *Richard Enesley*

Q. What would prevent you from conducting an EIS voluntarily?

A. *The major difference between an EA and an EIS is documentation of the Alternatives Analysis. Under this project we have analyzed a number of different alternatives. At the end of the EA, FHWA will decide if an EIS is warranted or if there is a finding of no significant impact.*

C. Construction could have some economic impact on Pleasant Hill. How can we benefit from the construction and the impacts?

Presentation continued with a discussion of various options in Pleasant Hill…..

Q. What amount of money has been set aside for improvements like this? Is it part of the original contract?

A. *There is no money "set aside" for anything at this time. We want to identify the impacts and mitigate those as much as possible and simply include those as a part of the overall project. In some cases, such as noise walls however, money is generally allocated at a rate of $50,000 for each impacted resident in order to determine its feasibility.*

Q. Given the grade difference between the east and west side of the Interstate, would it be possible to tunnel under rather than bridge across?

A. *No, it's really not feasible. There is still the problem with bringing the road back up to grade on either side of the freeway.*

Q. You talked about an Advisory Committee. Can I be a part of these meetings?

A. *We set up chairs for public attendance, but those meetings were structured for participation of the CAC members.*

C. We need a Pleasant Hill Advisory Committee. We want to leave our heritage in our neighborhood. We need to come together as a neighborhood. We want an economic empowerment zone.

C. The CAC asked Mr. Buchan to look at other alternatives, to scale down the design and now it's bigger than it was. You need sound barriers, but GDOT puts up those ugly steel walls. If they fix the sound, they create visual impacts.

Q. Does the northbound entrance ramp from Hardeman provide access only to I-75?

A. *At this point, yes. We could look into a separate lane to provide access to I-16.*

C. Winship Hills would like to work with Pleasant Hill.

Q. Will Walnut Street be closed during construction?

A. *Yes. It is possible that it will be closed for 18 -24 months.*

Q. There is no court reporter. How do you document this meeting?

A. *We have several people taking notes. We will prepare a meeting summary that will be included in the project documentation*

C. Don't feel like what is being suggested is not being heard. We will work with GDOT to get the parameters of what is up for discussion, work as a neighborhood, and then get back together with GDOT.

C. North Highland would like to work together with Pleasant Hill. We need to think of this more as whole rather than individual neighborhoods.

C. I would hope that Dr. Williams would meet with the Pleasant Hill residents to find out what we want.

C. We need to stand tall and work to save Pleasant Hill. This project offers a focused attention that some other issues don't.

C. Booker T. Washington Community Center has internet access available. Please come use our office if you want to get on line to see the project web site or make a comment.

C. GDOT asked to confirm the best way to work with the community from this point forward. It was stated that Dr. Williams would lead a sub-committee to study the options and communicate back and forth with GDOT and work through the homeowner association.

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 6:00 PM
Location: Booker T. Washington Community Center

Pleasant Hill Attendees:

Mr. Howard Scott	Director – Booker T. Washington Center
Mr. Peter Givens	Pleasant Hill Neighborhood Improvement Group
Approx. 25 residents	

GDOT/Consultant Attendees:

Mr. Glenn Bowman	GDOT – Asst. State Urban Design Engineer
Ms. Theresa Holder	GDOT - Urban Design Project Manager
Mr. Brad Hale	Moreland Altobelli - Project Manager

Meeting Highlights
The following are highlights from the above referenced meeting. Unless otherwise noted, individual statements outlined in this document are not exact transcriptions from the meeting and under no circumstances should be referenced as such in any other document.

Mr. Howard Scott opened the meeting with introductions, ground rules, etc.

Mr. Peter Givens gave a brief explanation of his understanding of the project status. He explained that one of the major changes required by FHWA on this project is the elimination of left-hand entrances and exits on the interstate. The project is still in the early stages, and there is still time for the community to request changes to certain elements of the project. Mr. Givens has met already met with City Council President Anita Ponder and U.S. Congressman Jim Marshall concerning the impacts of this project on the Pleasant Hill community.

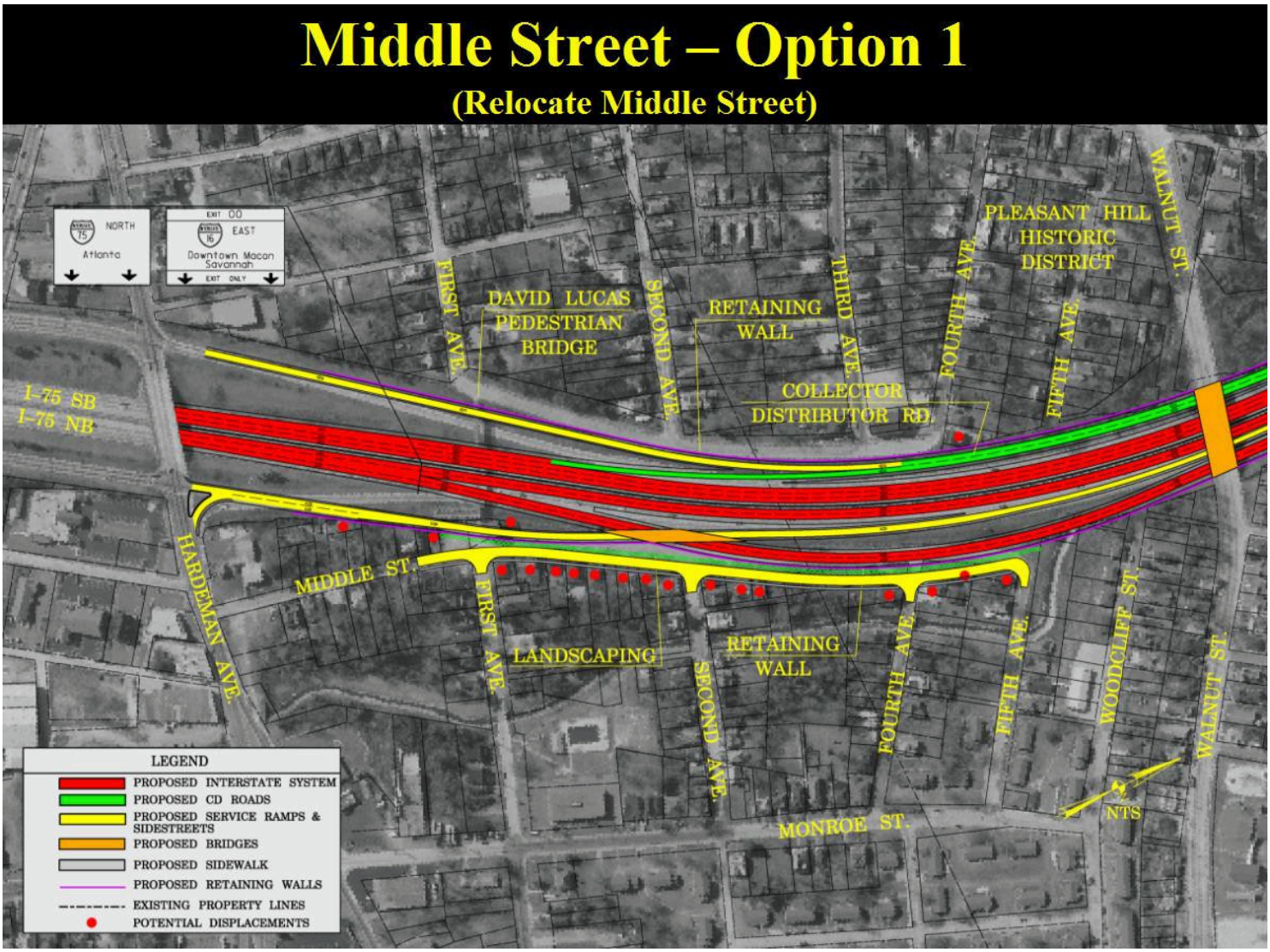
Mr. Glenn Bowman provided a brief synopsis of project schedule and future public involvement opportunities. He reiterated that the project is still in the early stages of preliminary design, and that there is still time to make adjustments that are within reason. The current concept, alternative #9, is the overall design that the project team is moving forward with. At this time, GDOT would like to get as much feedback as possible from the community.

Mr. Bowman noted the following key milestones in the project schedule:

- R/W Acquisition is scheduled to begin in fiscal year (FY) 2007. FY 2007 begins July 1, 2006 and ends June 30, 2007.
- Construction is scheduled to begin in FY 2010. FY 2010 begins July 1, 2009 and ends June 30, 2010.

Mr. Brad Hale then presented the following mitigation options for the Pleasant Hill neighborhood.

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006



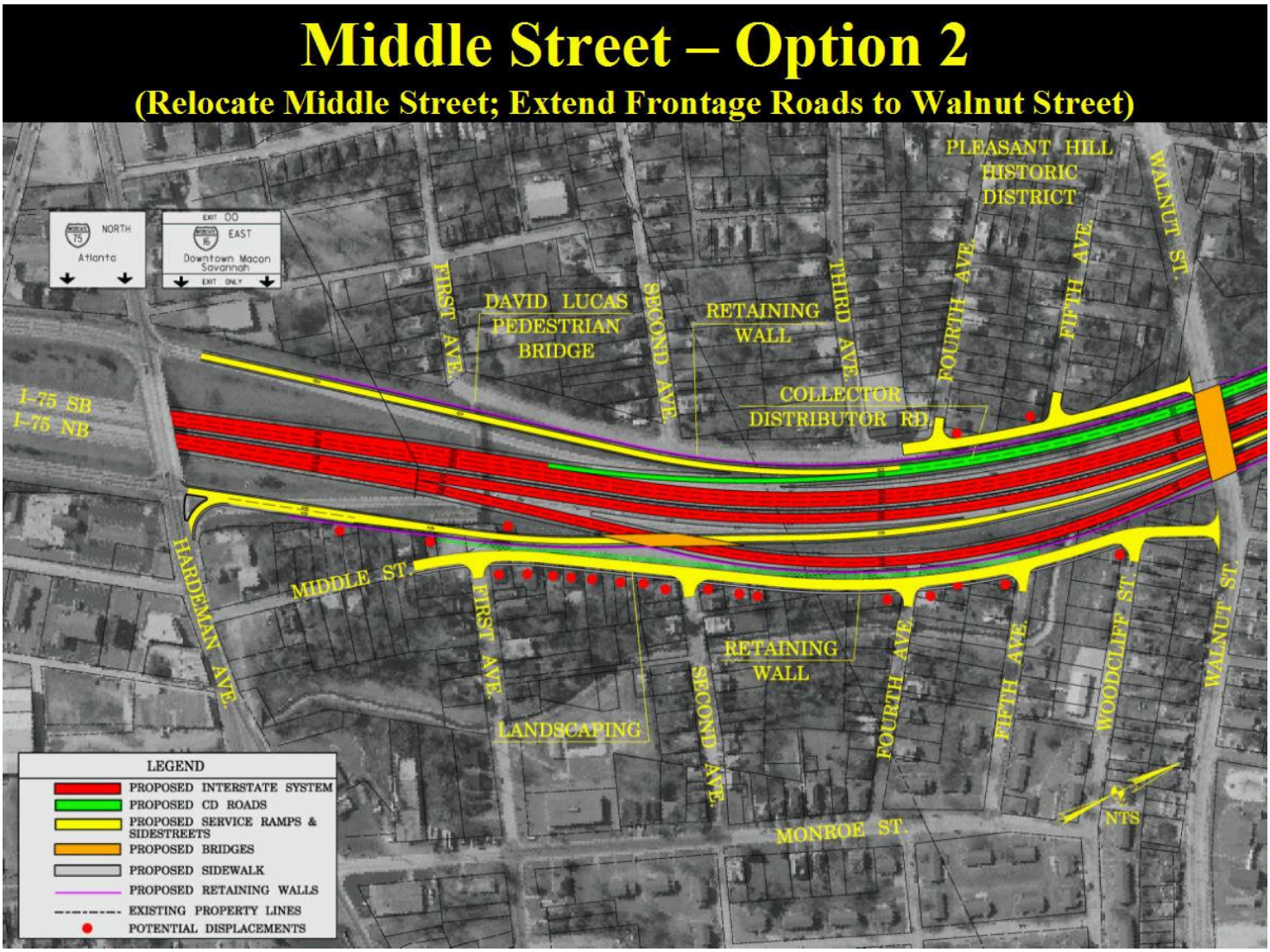
Middle Street Option 1

Description: Relocate affected portion of Middle Street between First Avenue and Fifth Avenue.

Potential Displacements: 19

Questions/Comments: None

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006



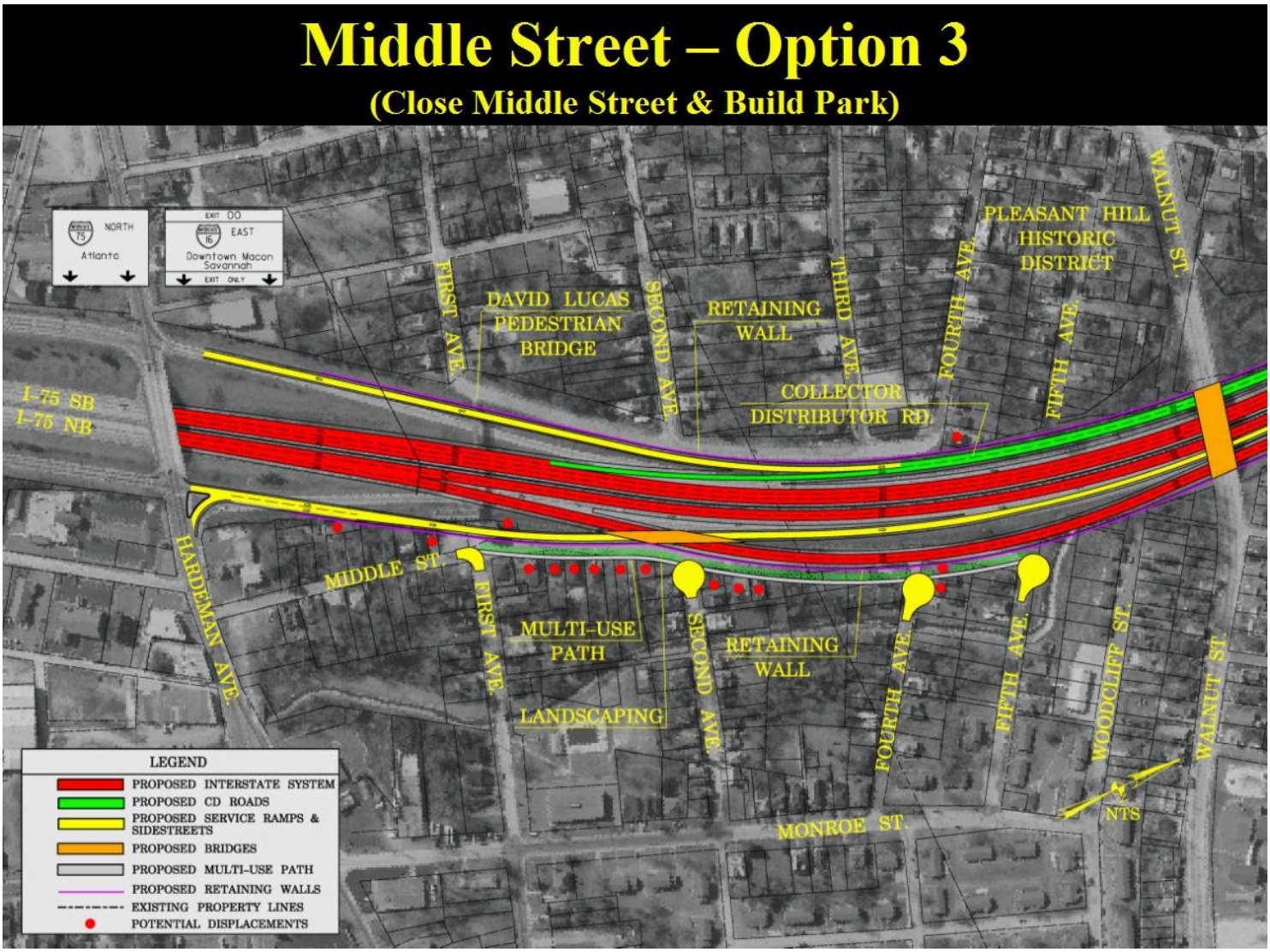
Middle Street Option 2

Description: Relocate affected portion of Middle Street between First Avenue and Fifth Avenue. Extend Middle Street from Fifth Avenue to Walnut Street. Extend the frontage road on the west side of I-75 from Fourth Avenue to Walnut Street.

Potential Displacements: 21

Questions/Comments: This option requires Craft Street to be closed to construct the retaining walls.

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006



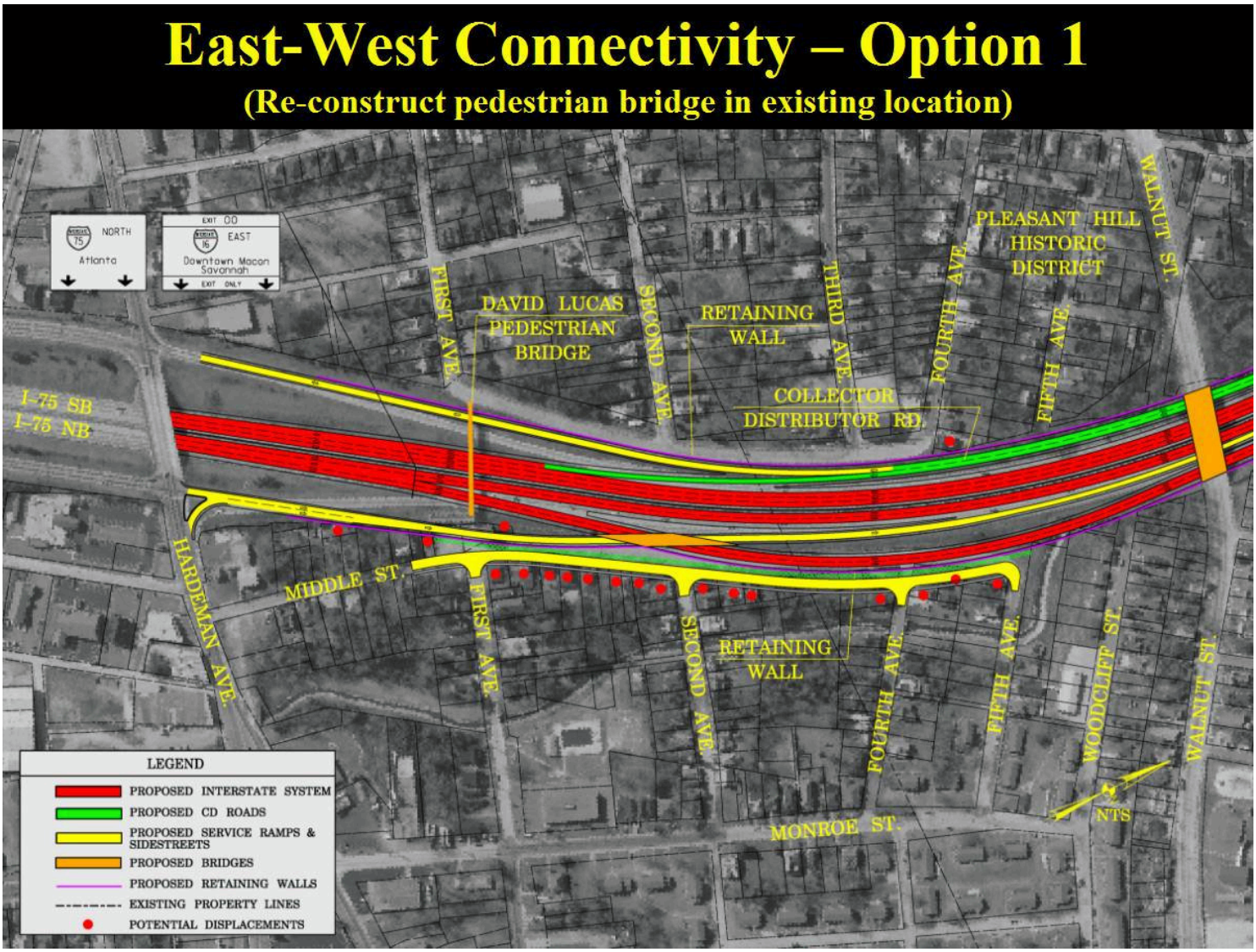
Middle Street Option 3

Description: Close Middle Street between First Avenue and Fifth Avenue. Terminate Second, Fourth, and Fifth Avenues with cul-de-sacs. Build multi-use path adjacent to interstate between First Ave. and Fifth Ave.

Potential Displacements: 15

Questions/Comments: Residents voiced concern that the 'dead-end' streets would be dangerous and would invite criminal activity.

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006

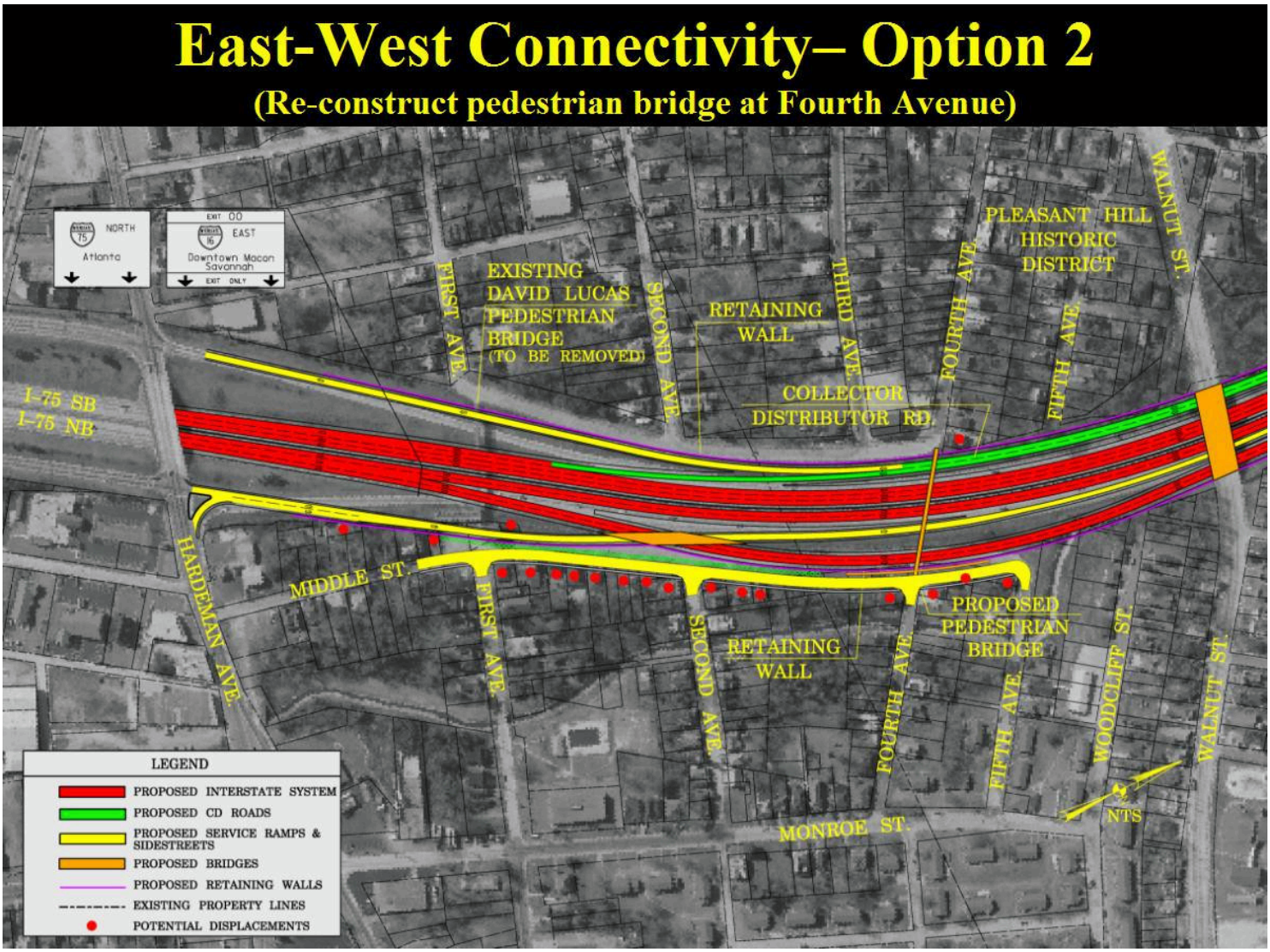


East-West Connectivity Option 1

Description: Reconstruct the David Lucas Pedestrian Bridge in its present location

Potential Displacements: N/A (19 displacements shown represent Middle Street option 1)

Questions/Comments: None.



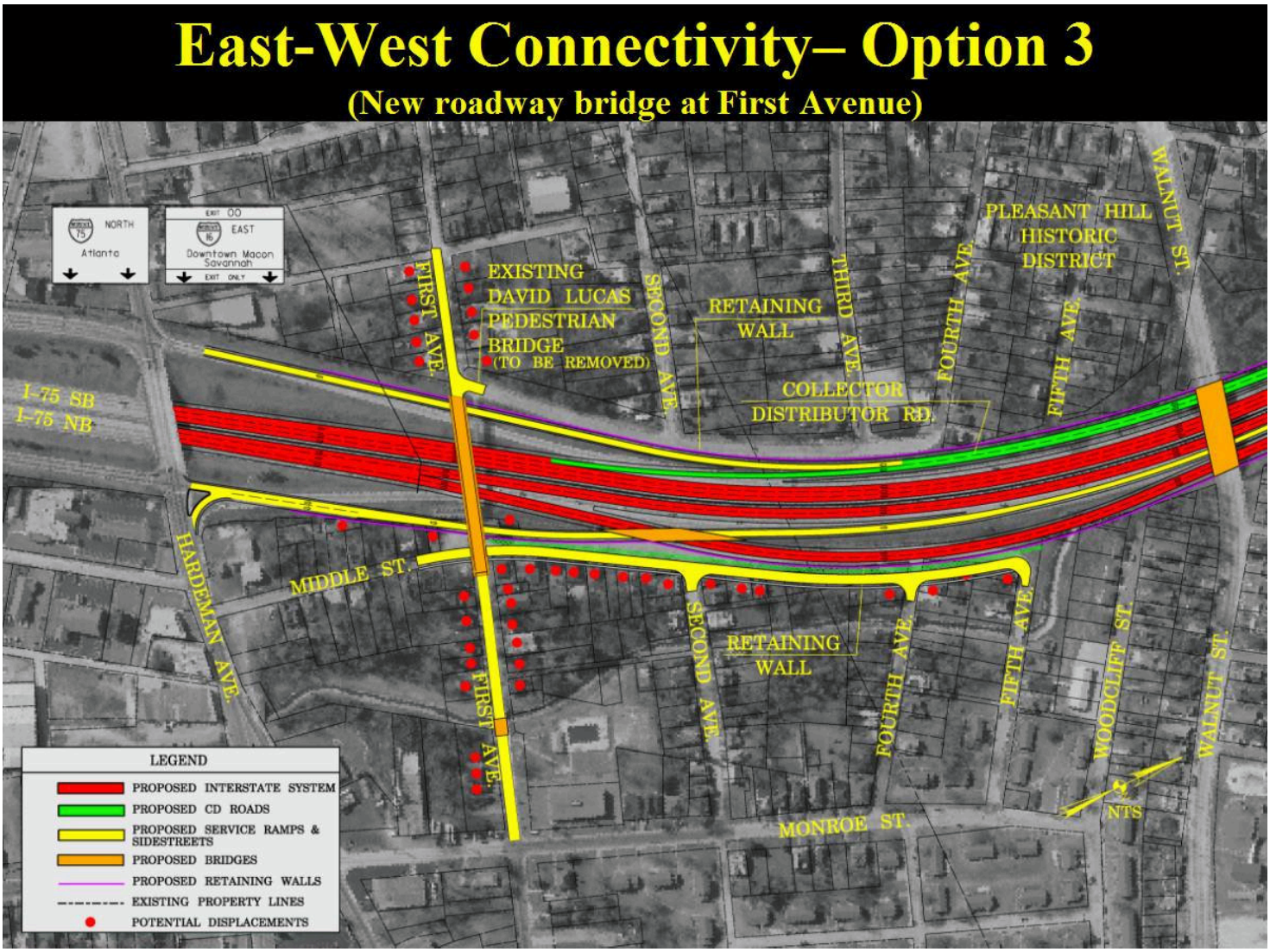
East-West Connectivity Option 2

Description: Reconstruct the pedestrian bridge at Fourth Avenue.

Potential Displacements: N/A (19 displacements shown represent Middle Street option 1)

Questions/Comments:
Q: Why would the pedestrian bridge need to be reconstructed at Fourth Avenue?
A: *The existing pedestrian bridge will need to be reconstructed due to conflicts with the proposed roadway. The location of the pedestrian bridge could therefore change, if the neighborhood desires it. This is just one alternative location.*

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006



East-West Connectivity Option 3

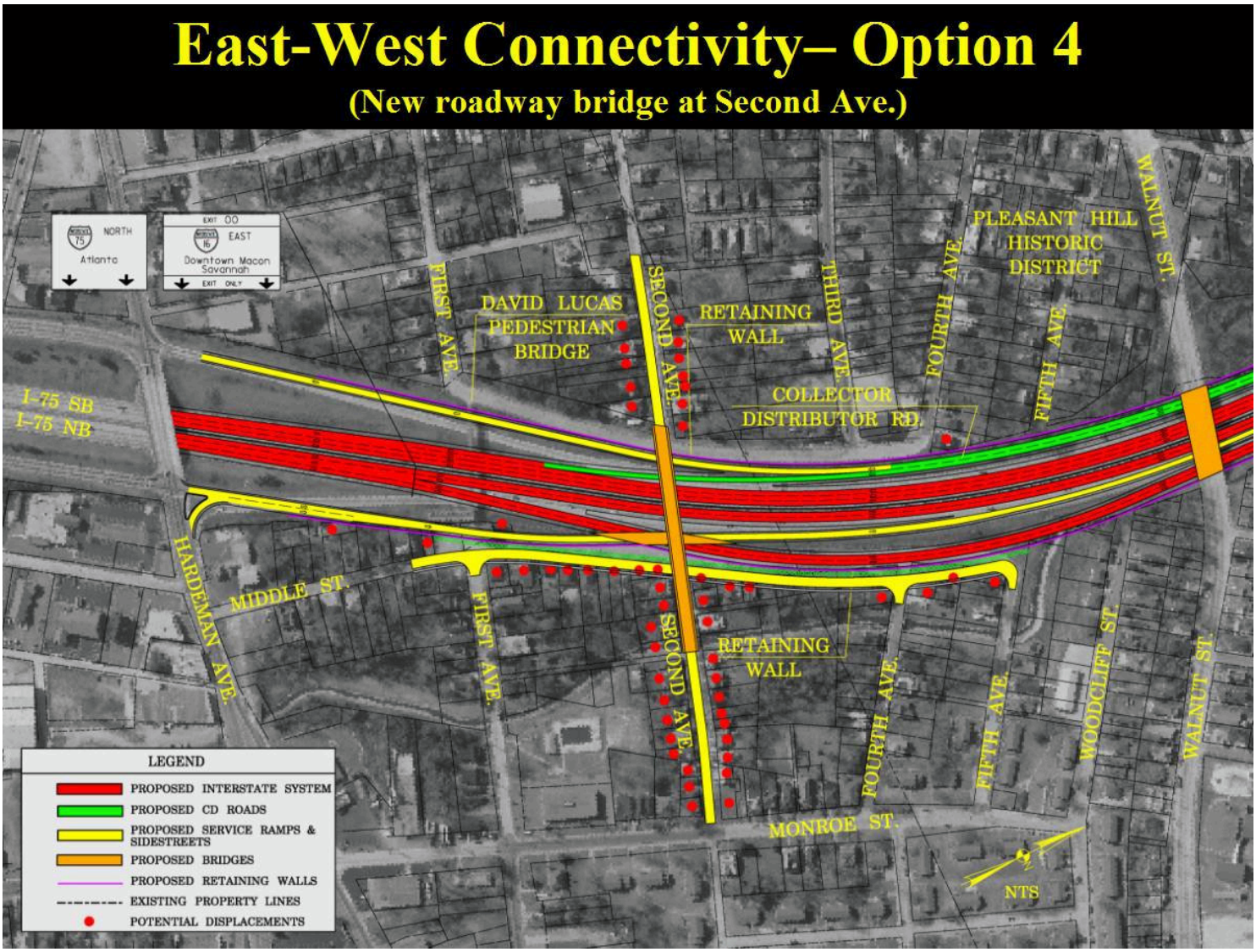
Description: Construct a new roadway bridge at First Avenue to handle both vehicular and pedestrian traffic. The proposed First Avenue Bridge would span over I-75, the interstate access ramps to/from Hardeman Avenue, and Middle Street. Residents at a previous meeting had suggested this option.

Potential Displacements: 43

Questions/Comments:
Q: How would this impact traffic on First Avenue east of Monroe Street, and nearby intersections?
A: *The only work done so far on this alternative has been an analysis of the horizontal and vertical geometry. If the community desires this alternative to be investigated further, the project team will do a complete traffic and environmental analysis.*

Comment: This option will make First Avenue the main thoroughfare and create additional traffic on the corridor. It will also impact 43 homes. We don't want to create more noise/air pollution. This will also create more traffic on Madison Avenue and require reconstruction of Madison Avenue due to the traffic.

Comment: What are the advantages of moving the pedestrian bridge? A lot of children are using the pedestrian bridge to go to school. This should be taken into consideration.



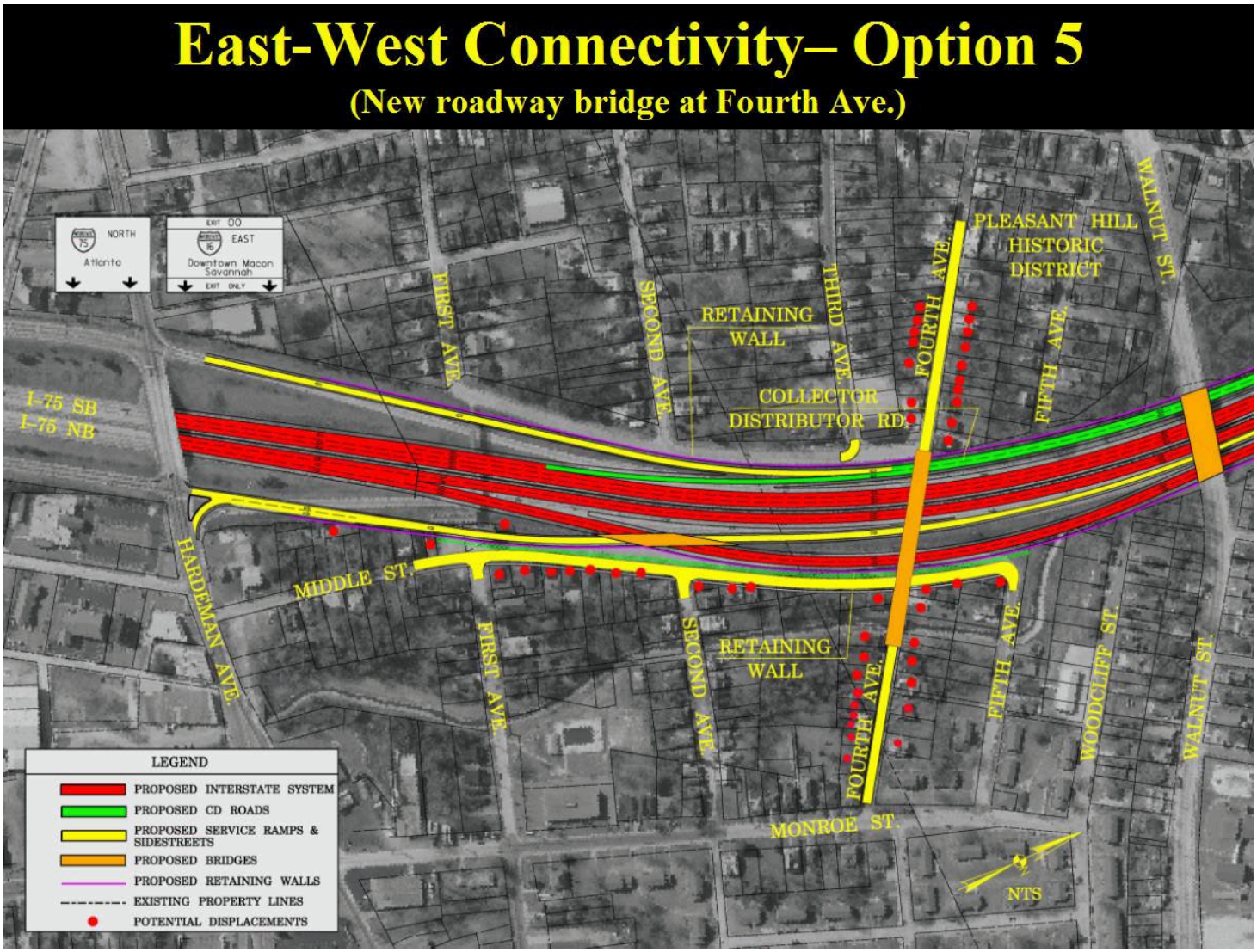
East-West Connectivity Option 4

Description: Construct a new roadway bridge at Second Avenue to handle both vehicular and pedestrian traffic. The proposed Second Avenue Bridge would span over I-75, the interstate access ramps to/from Hardeman Avenue, and Middle Street. Residents at a previous meeting had suggested this option.

Potential Displacements: 54

Questions/Comments: None

Pleasant Hill Neighborhood Meeting
Meeting Summary
January 25, 2006



East-West Connectivity Option 5

Description: Construct a new roadway bridge at Fourth Avenue to handle both vehicular and pedestrian traffic. The proposed Fourth Avenue Bridge would span over I-75, the interstate access ramps to/from Hardeman Avenue, and Middle Street. Residents at a previous meeting had suggested this option.

Potential Displacements: 49

Questions/Comments: None

Following Mr. Hale's presentation of the above alternatives, Mr. Bowman discussed the following issues:

1. **Property Acquisition.** Mr. Bowman noted that there are strict Federal guidelines for acquiring property for roadway improvements. Mr. Givens expressed concern that 'fair market value' might not cover the cost to buy a comparable home. Mr. Bowman explained that compensation would be based on comparable homes within the Pleasant Hill area. Mr. Bowman also said that displaced residents that do not have a mortgage now would not have a mortgage in the after condition. One resident noted that only a comparable home within Pleasant Hill would be acceptable. Mr. Bowman said that vacant lots could be utilized to build new homes for displaced residents, if necessary.

2. **Sound Barriers.** Mr. Bowman requested that the Pleasant Hill community provide the Department with feedback concerning their desires for sound barriers. Mr. Scott and Mr. Givens responded that a subcommittee has been assembled and will meet to discuss this and other issues.

3. **Landscaping.** Mr. Bowman again requested that the community provide feedback regarding their desires for landscaping/aesthetic improvements. Do you want the freeway to be attractive from the driver's perspective (i.e. median landscaping, etc.), or is the primary concern with how the freeway will look from the neighborhood? Mr. Bowman also requested that the community consider the cost of maintenance for any proposed landscaping features. Who will handle this maintenance? The neighborhood? The city?

General questions & answers:

Q: How long will Walnut Street be closed? Is there any way to avoid closing Walnut Street? One attendee pointed out that the existing Walnut Street Bridge was much wider than necessary.
A: *Re-building Walnut Street may require temporary closure of this roadway for a period of up to 2 years. The project team committed to investigating ways to stage the re-construction of Walnut Street to avoid closure, and to investigate reducing the overall bridge width.*

Q: What environmental impacts occurred as a result of the original construction of I-75 in the 1960's? Will the Department conduct a study to address the cumulative impacts to Pleasant Hill, and not just what will happen as a result of this project?
A: *Mr. Bowman responded that since the original interstate construction occurred before the National Environmental Protection Act, an environmental document was probably not prepared for this work. He said the project team would investigate this further and that the Department may consider a study of the cumulative impacts to Pleasant Hill.*

Q: Why is an Environmental Assessment (EA) being prepared for this project and not an Environmental Impact Statement (EIS)?
A. *At this time, an EA seems to be the appropriate level of environmental analysis based on the impacts associated with this project. Following review by FHWA, it may be determined that an EIS is necessary.*

Q: Will GDOT act as the real-estate agent for affected property owners?
A: *GDOT will conduct a search for displaced residents, but so can the property owner. GDOT will work with each individual to find something 'as good, or better' than their existing property.*

Mr. Scott closed the meeting by saying the Pleasant Hill Neighborhood Improvement Group will have their next meeting on February 9th. At this meeting, they will develop a list of the neighborhood's concerns/requests with the I-16/I-75 project, and will set priorities.

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MEETING MINUTES

Project:	**I-16/I-75 from I-75 at Hardeman Ave. to I-16 at Spring St.**
	NH-16-(104) – Bibb County, P.I. 311410
Meeting:	**Pleasant Hill Coordination Meeting**
Location:	**Booker T. Washington Community Center**
Prepared By:	Will Sheehan
Prepared On:	August 17, 2006

Meeting Date	08/16/06
MA Project No.	311410
CC:	File 99516A
	Attendees
	Liz Sanford (Sycamore)
	Dom Saulino (HNTB)

The purpose of the meeting was to discuss modifications to the project that have occurred since the last meeting, to gain more feedback from the Pleasant Hill community, and to continue to develop a "reasonable and appropriate" plan for mitigation. Mr. Brad Hale, project manager for consultant Moreland Altobelli, conducted the meeting with the assistance of Mr. Peter Givens of the Pleasant Hill Neighborhood Improvement Group (PHNIG).

Coordination with Pleasant Hill since last meeting

Mr. Hale outlined the following activities that had occurred since the last meeting with Pleasant Hill on January 25, 2006.

- A workshop with Pleasant Hill leaders was held on March 29, 2006. The purpose of this workshop was to gain additional feedback from community leaders.
- The PHNIG drafted a proposal letter to the GDOT, dated April 20, 2006, which included several requests for changes/additions to the proposed project within the Pleasant Hill neighborhood.
- The GDOT drafted a response letter to the PHNIG proposal on July 21, 2006. Many of the PHNIG requests were incorporated into the project.

Recent changes to project

It was stated that this would not be the last meeting with Pleasant Hill and that coordination would continue. The following is a summary of the changes/additions that have been made to the project so far:

1) The frontage road on the west side of I-75 would be closed and converted to green space between First Avenue and Second Avenue. In addition, a cul-de-sac would be constructed at the dead end of First Avenue.

2) First Avenue and Second Avenue would be resurfaced between the Frontage Rd. and Pursley St.

3) A 10' wide sidewalk would be added to the reconstructed Walnut St. Bridge. Mr. Hale also mentioned the possibility of coordinating the sidewalk with a proposed multi-use trail in the area that is not associated with this project.

4) GDOT and MA are investigating construction staging alternatives for the Walnut St. Bridge. As requested by several members of the PHNIG, GDOT's goal is to reconstruct this bridge without closing Walnut Street.

5) Middle St. will be extended to Walnut St. The exact alignment of Middle Street and location for the proposed Walnut Street intersection will be determined following further coordination with the neighborhood.

6) The design team will investigate options to cover the drainage canal and convert it into a green space. In-depth studies will have to be completed to determine actual impacts to the drainage channel.

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MEETING MINUTES

Following the discussion of the recent plan changes, Mr. Hale briefly described the options available for aesthetic walls and visual barriers. Mr. Peter Givens stated that significant progress had been made in the discussions with the GDOT and that the "door was left open" for continued negotiations.

Questions & Answers

- **Will on-street (parallel) parking be taken away from Walnut Street in order to construct the 10' sidewalk?** *The widened 10' sidewalk is currently only proposed on the new Walnut Street Bridge over I-75. The plan currently does not impact parking along Walnut Street.*

- **Mr. Givens requested that the entire area between First Ave. and Fifth Ave. and from the drainage canal to reconstructed Middle St. be converted to a green space. He noted that many of the properties would have to be acquired anyway to construct the shifted Middle St.** *GDOT can only acquire property for transportation purposes.*

- **How many residents would be displaced as a result of the shifting of Middle St. to the east?** *There would be approximately eighteen displacements depending on the final alignment of the relocated road.*

- **What is the future of the David Lucas pedestrian bridge?** *The plan currently proposes to reconstruct the David Lucas Pedestrian Bridge in its present location.*

- **Can architectural finishes be added to the bridge structures to make them look better?** *Yes. GDOT has committed to add architectural finishes and/or streetscaping to the proposed Otis Redding Bridge. Each bridge on the project will need to be evaluated on a case-by-case basis.*

- **If landscaping is added along Middle St., who will maintain it?** *Maintenance of the local streets and associated landscaping would be the City of Macon's responsibility following the completion of the project.*

- **Will the level of environmental documentation be an Environmental Assessment (EA) or an Environmental Impact Statement (EIS)?** *The level of environmental documentation on a federal aid project is ultimately decided by FHWA. FHWA has concluded that an EA is appropriate for this project.*

- **Will this project impact the Linwood Cemetery and the Rodney Davis gravesite?** *There will be no physical impacts to the cemetery and gravesite due to the interchange project.*

- **How long will the new Walnut St. Bridge be? Will it extend further into the neighborhood?** The limits of the Walnut St. Bridge will remain approximately where they are now. Building retaining walls will accommodate the widened interstate footprint.

- **Is the impact to Pleasant Hill a result of FHWA's requirement to have only right-hand exits from I-75? If so, could the interstate system through Macon be renumbered so that the segment of I-75 through Pleasant Hill would become I-475, thereby eliminating the need to reconfigure the I-16/I-75 interchange?** *An undesirable, complex weave currently exists on I-75 northbound between the entrance ramp from Hardeman Ave., and the exit to I-16. Correcting this problem requires 'braiding' the successive entrance/exit ramps mentioned above. This accounts for all but one of the potential displacements within the Pleasant Hill District. Renumbering the interstates through Macon had been discussed with FHWA at one time, but was eliminated from further consideration.*

- **Will Middle St. still connect with Hardeman Avenue?** *Yes.*

- **How will this project impact Little Richard's childhood home?** *The current alignment of relocated Middle St. would require either removal or relocation of this structure. The alignment of Middle Street could be shifted to miss the house; however, this could require two or three more displacements.*

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MEETING MINUTES

- **Have the potentially displaced residents been notified yet?** *It is too early in the design process to determine which residents will definitely be displaced. Once the plan in Pleasant Hill has been finalized, all affected residents will be duly notified in a timely manner.*

- **Can improvements be made to the appearance of the Rodney Davis gravesite?** *GDOT will consider landscaping, etc. in this area within reason.*

Some citizens expressed concerns regarding impacts to the elderly and sick residents located along Middle Street. Their concern regarded the displacement of some of these residents on a fixed income. If they are displaced and moved into another house (which is probably more costly than what they are currently living in), how will they be able to afford the property taxes on a more expensive house.

Next Steps

Following the question and answer session, Mr. Hale outlined the next steps in the design process. He noted that the preliminary engineering would be ongoing while the environmental document was being updated. In addition,a Public Information Open House (PIOH) would be held in the fall of 2006 and a Public Hearing would be held in the spring of 2007. He concluded by again emphasizing that coordination with the Pleasant Hill community would continue throughout the design process.

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MEETING MINUTES

ATTENDEES	ORGANIZATION	PHONE
Ben Buchan	GDOT – Urban Design	404-699-4407
Jeff Simmons	GDOT – Urban Design	404-656-5444
Theresa Holder	GDOT – Urban Design	404-656-5444
Jennifer Mathis	GDOT - OEL	404-699-4408
Brad Hale	MA - Project Manager	770-263-5945
Chris Kingsbury	MA - Landscape Arch / NEPA Specialist	770-263-5945
Shrujal Amin	MA - Environmental	770-263-5945
Will Sheehan	MA - Highway Designer	770-263-5945
Peter Givens	PHNIG	
Amni? Hassan	We Care Group	
Alveno Ross	Macon City Council	
Johnny Lowdes	Pastor - St. Mary's	
David Biggors	Community Church of God	
Jim Thomas	Macon Planning & Zoning	
Bill Causey	City of Macon	
Randy Harshbarger	Resident	
Naomi C. Johnson	Resident	
K. Miller	Resident	
Chester Gibbs	Resident	
Willie James Irvin?	Resident	
Yolanda Carswell	Resident	
Adonis Thomas	Resident	
Mary Powell	Resident	
Ora Bess	Resident	
Theresa T. Watkins	Resident	
Greg Floyd	Resident	
Robert J. Williams	Resident	
Margaret Thompson	Resident	
Rosezenia? Benes	Resident	
Cora Bivins	Resident	
Carolyn Odona?	Resident	
Stephen Chanin	Resident	
Samuel Williams	Resident	
Caralyn Williams	Resident	
Carolyn C. Nedd	Resident	
Willie F. Wright	Resident	
Mrs. Mae Belle Culler	Resident	
Virgil Burton Sr.	Resident	
N.A. Pietrzak Sr.	Resident	
Nicholas Pietrzak II	Resident	
Alex Pietrzak	Resident	
Russell Claxton	Resident	
Vernon Ryle	Macon MPO	

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MEETING MINUTES

Project:	**I-16/I-75 from I-75 at Hardeman Ave. to I-16 at Spring St.**
	NH-16-(104) – Bibb County, P.I. 311410
Meeting:	**Pleasant Hill Coordination Meeting**
Location:	**Booker T. Washington Community Center**
Prepared By:	Will Sheehan
Prepared On:	September 1, 2006

Meeting Date	08/31/06
MA Project No.	99516A
CC:	File 99516A
	Attendees
	Liz Sanford (Sycamore)
	Dom Saulino (HNTB)

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Brad Hale	MA - Project Manager	770-263-5945
Will Sheehan	MA - Highway Designer	770-263-5945
Stephen Duval	MA	478-755-0000
Peter Givens	PHNIG	478-957-8565
Virgil Burton Sr.		478-742-5973
Willie James Irvin		478-742-4662
Greg Floyd	Macon Bibb Planning & Zoning	478-751-7464
Russell Claxton		478-750-0055
Alfred Person		478-737-2565

The purpose of the meeting was to continue coordination with the Pleasant Hill community with the goal of reaching a compromise over their mitigation requests. Mr. Peter Givens, President of the Pleasant Hill Neighborhood Improvement Group (PHNIG), conducted the meeting.

Mr. Givens opened the meeting with introductions followed by a brief timeline of recent coordination between the PHNIG and the GDOT since the last meeting.

Since last meeting

1. The PHNIG drafted a proposal to GDOT formally outlining their mitigation requests in April 2006.
2. GDOT drafted a response letter addressing those requests in July 2006.

Each point in GDOT's response letter was discussed in detail. The following are the key points of the discussion.

- The PHNIG would be satisfied with an Environmental Assessment (EA) in lieu of an Environmental Impact Statement (EIS) as long as their requests are properly considered.

- The PHNIG is concerned about the handling of displaced residents. It was specifically noted that the few residents who currently live on Middle St. would like to be relocated to another location within Pleasant Hill (not Middle St.). These residents have been attending the PHNIG meetings.

- The community is still concerned about the visual and noise impacts to homes within close proximity of the interstate. GDOT agreed to investigate alternate methods of noise abatement if sound barriers were determined ineffective.

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MEETING MINUTES

- The PHNIG agreed that removing every home within 100-yards of the interstate, as requested in their proposal, may have been "ill advised." Their primary concern was the noise impacts. They noted that many of the homes shown as potential displacements were vacant.

- The PHNIG expressed concern regarding the "abandoned houses and drug havens" that currently exist on the block of Middle St. between Hardeman Ave. and First Ave. They requested that GDOT improve this area consistent with the improvements to the adjacent blocks on Middle St.
  - It was suggested that the City of Macon purchase the properties on the block and that GDOT develop it into green space. Mr. Givens responded that this idea had been previously rejected by the city due to lack of funds.

- The PHNIG requested that the relocated Middle St. be removed from the plans and that a green space be developed in its place. Mr. Hale responded that the wall along the interstate could be replaced with a grassed slope or a combination of grassed slope and wall that would create a green space in place of proposed Middle St.
  - Middle St. would end at and turn onto First Ave.
  - A cul-de-sac would be constructed at the dead ends of Second Ave. and Fourth Ave.
  - The section of Middle St. currently proposed from Fifth Ave. to Walnut St. would remain intact with Fifth Ave. ending at and turning onto Middle St.
  - The grassed slope of the entrance ramp could also require the removal of the several houses on the first block of Middle St. that were previously noted as a cause of concern for the community.
  - The "Little Richard House" would be removed due to the grassed slope. The PHNIG responded that saving this house was not a priority for the neighborhood. Mr. Givens also stated that he would personally get in touch with Little Richard to assure the project team that this was not a concern to the neighborhood.
  - A visual / noise barrier could be placed at the top of the slope along the interstate to minimize impacts to the community. The community would have input as to the type of barrier implemented.

- GDOT noted that all driveways on Hardeman Avenue within 300 feet of the proposed interstate ramps may have to be closed. GDOT policy requires a minimum of 300 feet to be retained as "limited access." This may require displacement of several properties along Hardeman Avenue. The PHNIG did not object.

- The idea of a new vehicular and pedestrian bridge connecting east and west Pleasant Hill over the interstate was revisited. Several vehicular and pedestrian bridge locations were investigated including the connection from Third Ave. to Fifth Ave. and the connection from First Ave. (east side) to First Ave (west side). The design team reiterated that, due to the elevation difference between east and west Pleasant Hill and clearance requirements over the interstate, a new roadway/pedestrian bridge between east and west Pleasant Hill would not be economically feasible.
  - A parallel, but separated lane, on the Walnut St. Bridge was mentioned; however, the PHNIG rejected this suggestion.
  - The PHNIG stated that if a vehicular bridge could not be constructed over the interstate, then the David Lucas Pedestrian Bridge should be reconstructed in its present location. The landing on the east side of the interstate was noted as a cause of concern due to the creation of "hiding places" which could lead to increased crime.

- The next meeting was tentatively scheduled for Wednesday, September 13, 2006.

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MEETING MINUTES

Project:	**I-16/I-75 from I-75 at Hardeman Ave. to I-16 at Spring St.**
	NH-16-(104) – Bibb County, P.I. 311410
Meeting:	**Pleasant Hill Coordination Meeting**
Location:	**Booker T. Washington Community Center**
Prepared By:	Will Sheehan
Prepared On:	September 14, 2006

Meeting Date	09/13/06
MA Project No.	99516A
CC:	File 99516A
	Attendees
	Liz Sanford (Sycamore)
	Dom Saulino (HNTB)

ATTENDEES	ORGANIZATION	PHONE
Ben Buchan	GDOT – Urban Design	404-699-4407
Jeff Simmons	GDOT – Urban Design	404-656-5444
Theresa Holder	GDOT – Urban Design	404-656-5444
Jennifer Mathis	GDOT - OEL	404-699-4408
Brad Hale	MA - Project Manager	770-263-5945
Shrujal Amin	MA - Environmental	770-263-5945
Will Sheehan	MA - Highway Designer	770-263-5945
Stephen Duval	MA	478-755-0000
Peter Givens	PHNIG	478-957-8565
Alfred Person	PHNIG	478-737-2565
Naomi Johnson	PHNIG	478-746-7173
Ora Bess	PHNIG	478-738-0646
Chester Gibbs		478-745-8263
Russell Claxton		478-750-0055
Mary Powell		478-741-7016

The purpose of the meeting was to continue coordination with the Pleasant Hill community with the goal of reaching a compromise over their mitigation requests. The proposed mitigation options and changes agreed upon at the previous meeting were presented to the community leaders on an aerial display. Mr. Peter Givens, President of the Pleasant Hill Neighborhood Improvement Group (PHNIG), conducted the meeting. The key points of the meeting discussion are as follows.

- It was noted that the mitigation plan developed jointly between GDOT and the PHNIG is preliminary and will require review and approval by several state and federal agencies, as required by the National Environmental Policy Act (NEPA).
  - The State Historic Preservation Officer (SHPO) has not yet evaluated the Pleasant Hill mitigation plan. The community's strong support of the mitigation proposal and commitment to preserve and enhance homes within the neighborhood with their own Plans for Rehabilitation of the Pleasant Hill Neighborhood would improve its chances of obtaining approval from the SHPO. The issue here is "long term neighborhood viability vs. the loss of several historic homes".

- The community is in favor of relocating historic homes that are structurally sound. Local codes dictate what type of structures can be moved. Some codes require that the entire structure be brought up to current building codes for it to be eligible for relocation; this could jeopardize the economic viability of relocating the structure versus constructing a new home.

- As stated at the last meeting, GDOT policy recommends limited access (i.e. – no driveways or local street intersections) within 300' of an interstate interchange. The purpose of this policy is to avoid conflicts between

traffic getting on/off the interstate and local traffic (vehicles entering/exiting driveways, etc.). GDOT is currently proposing the following on Hardeman Avenue:

- **West of I-75 = 300' limited access**. This would require closure of the Craft Street / Hardeman Ave. intersection, and closure of two private driveways between the interstate and Pursley Street. Access to each of these properties will be looked at more closely as the project progresses.
- **East of I-75 = 200' limited access.** Since the existing Middle Street / Hardeman Avenue intersection is only 200' from the interstate ramp, GDOT will make an exception to the 300' rule to avoid closing this intersection. This would require closure of the liquor/convenience store driveway on Hardeman Avenue, but would not disturb the driveway to this property from Middle Street. This will need approval by FHWA.

- According to Mr. Givens, the closing of the Frontage Rd. between First Ave. and Second Ave. on the west side of I-75 will not affect the city bus routes.

- The community indicated that the "resurfacing" of First Ave. and Second Ave. might not be adequate to fully repair the roadway. The GDOT assured them that the problem would be carefully diagnosed and the roadways would be properly "rehabilitated".

- The community desires a connection to the Ocmulgee Heritage Trail; however, they would prefer that the section of trail through Pleasant Hill be named the Pleasant Hill Heritage Tour. The PHNIG made it very clear that, as mitigation for the impacts to their community, improvements within Pleasant Hill should take priority over the trail connection.
  - The exact location of the trail through Pleasant Hill will be determined later; however, the PHNIG stated that they would submit a prioritized list of requests within one week.
  - GDOT assured the PHNIG that the improvements requested within the Pleasant Hill community would take priority over the Ocmulgee Heritage Trail extension.

Mr. Ben Buchan stated that the next step would be to schedule a Public Information Open House (PIOH) now that a preliminary mitigation compromise has been reached with the community. If need be, GDOT is open to another meeting with the overall Pleasant Hill neighborhood prior to the PIOH. The PIOH will be open to the public and would focus on the entire project, not just the section through Pleasant Hill. A strong show of support from the Pleasant Hill community would be greatly appreciated at the PIOH. Mr. Peter Givens concluded the meeting by expressing gratitude on behalf of Pleasant Hill towards the GDOT and its willingness to consider the needs of the neighborhood during the planning and environmental process.

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MEETING MINUTES

Date: 08-16-07
Time: 10:00AM
Location: Booker T. Washington Community Center
Project Name: I-16/I-75 Interchange Improvement Project
Subject: Pleasant Hill Historic District – SHPO Proposed Mitigation

Attendees:

See Attached Sign-in Sheet

Prepared By: Linda Cooks

- Peter Givens of Pleasant Hill Neighborhood Involvement Group (PHNIG) opened the meeting and began introductions of those in attendance.

- Brad Hale of Moreland Altobelli Associates, Inc. (MAAI) discussed the purpose of the meeting.

- Todd Hill of MAAI gave a brief description of the overall NEPA environmental process and presented mitigation already discussed between Georgia Department of Transportation (GDOT) and the Pleasant Hill neighborhood.

- Dr. Ray Luce of Historic Preservation Division of the Department of Natural Resources (HPD) described the Section 106 process and described several additional proposed mitigation measures suggested by the SHPO:

    1. Preserve the Little Richard House – perhaps locate a sponsor such as the Music Hall of Fame or Mercer University. Use as a "musician-in-residence" facility. Should be moved within the neighborhood or if that is not possible, perhaps it can be moved to the Music Hall of Fame.

    2. Create a local development zone or enterprise development area that would provide guidance/money/tax incentives for the local residences for preservation/rehabilitation of existing homes within the neighborhood. An example of this type of project would be the Martin Luther King, Jr. Historic District in Atlanta.

    3. Work the existing street grid of Middle Street into the linear park. Use signage to describe what the neighborhood design in that area was before the project.

Richard Cloues of HPD added that there is little funding available for such projects; grants for non-profits and cities are limited but there are county and state tax incentives.

- Peter Givens stated that he wanted more time to discuss these mitigation measures with SHPO.

- Glenn Bowman of GDOT stated that though the ideas presented by the SHPO are good ideas, we need to keep the project on schedule for right-of-way authorization in FY 2008.

- Peter Givens stated that in past actions, the neighborhood has been quick with responding and following through on their end to keep the process moving forward. Feels that they need to talk about the specifics of the mitigation suggestions with SHPO.

- Glenn Bowman asked Katy Allen of Federal Highway Administration (FHWA) if any of the measures discussed at the meeting thus far would be a show stopper to the project money wise.

- Katy Allen stated no, that the ideas presented seemed reasonable. She was concerned, however with who would be responsible for the specifics of these ideas. FHWA must be certain that the mitigation measures are do-able and able to be tracked for completion. Who will maintain the city park? Who will maintain the roads?

- Peter Givens stated that the PHNIG is already there. That the ideas presented by the SHPO have already been discussed within the PHNIG and that there are a lot of people involved that are outside of this circle.

- Glenn Bowman – Next Steps:
    - PHNIG and the SHPO will meet to discuss the mitigation measures.
    - PHNIG will get back to GDOT regarding what additional mitigation measures discussed with the SHPO could be reasonably included within the current mitigation plan.

- A comment was made to be sure to look at how the project will affect the whole neighborhood, not just the project area within the neighborhood.

- Marie Jones of Macon Parks and Recreation – The proposed linear park will be maintained by the city. Will the city have input in the plant material selected for the linear park? Neighborhood would also have input regarding which landscape materials are to be used.

- Glenn Bowman asked Katy if we need specific details on the type of plants to be used or can it be noted as an environmental commitment within the NEPA document.

- Katy Allen stated a landscape architect should coordinate with the planning and design representatives within the Macon City Parks Department including input from Maintenance and include the neighborhood's contribution of ideas. Need to be detailed about the cost.

- Peter Givens stated that we (PHNIG) can price out each house and how much it will cost to rehabilitate each house.

- Glenn Bowman stated that as much detail regarding cost needs to be obtained.

- Katy Allen – FHWA is not usually involved with enterprise zoning. This would be outside the scope of this project.

- Peter Givens explained that the construction of the interstate (mid-60's) split the neighborhood in half and reduced the size of the Linwood Cemetery by a third. The existing Walnut Street paved over the graves of two Black women from the Pleasant Hill neighborhood who started the first black college in Macon. Impact was felt all the way to Payne City and downtown Macon.

- Katy Allen – Details and terms of the newly proposed mitigation needs as much substance as possible before the hearing. Can state in the document that this is where we are in the process at this time.

- Peter Givens – he has the details of who owns individual impacted properties, who wants to sell their property, and who wants to keep their property.

- Carol Perry - Details regarding the relocation of eligible houses needs to be coordinated with right-of-way representatives.

Pleasant Hill Mitigation Meeting
Booker T. Washington Community Center
August 16, 2007

NAME	ORGANIZATION	E-MAIL	PHONE NO.
Gordon Sisk	GDOT	Gordon.Sisk@dot.state.ga.us	404-656-5444
Peter Givens	PHNIG		
Carol Perry	GDOT ROW	Carol.Perry@dot.state.ga.us	
Linda Cooks	MA	lcooks@maai.net	770-263-5945
Todd Hill	MA	thill@maai.net	770-263-5945
Glenn Bowman	GDOT	Glenn.Bowman@dot.state.ga.us	
Katy Allen	FHWA	katy.allen@fhwa.dot.gov	
Ray Luce	HPD-DNR	rluce@dnr.state.ga.us	
Amanda Schraner	HPD-DNR	Amanda_Schraner@dnr.state.ga.us	
Richard Cloues	HPD-DNR	Richard_Cloues@dnr.state.ga.us	
Sandy Lawrence	GDOT/OEL	Sandy.Lawrence@dot.state.ga.us	404-699-4425
Jennifer Mathis	GDOT/OEL	Jennifer.Mathis@dot.state.ga.us	404-699-4408
Bill Causey	City of Macon PWD	Bill.Causey@macon.ga.us	478-751-9257
Charles Rutland	Homevestors	Charles.Rutland@homevestors.com	478-746-4446
Lee Barnes			
Della Henderson	Pleasant Hill Nbhd	CWright2003@netzero.net	
Alfred Person	PHNIG	Person1898@bellsouth.net	478-737-2565
Johnny Lowder	St. Mary Baptist. Church	1456 Woodliff	478-755-9871
Naomi C. Johnson	PHNIG	PleasantHillNeighborhood@yahoo.com	
Jonathan Cox	GDOT/OEL	jonathan.cox@dot.state.ga..us	
Michele Lindberg	FHWA	Michele.Lindberg@fhwa.dot.gov	404-562-3634
Gregory Floyd	Macon Bibb P & Z	gfloyd@mbpz.org	478-751-1464
Christy Poon-Atkins	FHWA	Christy.Poon-Atkins@fhwa.dot.gov	404-562-3638
Russell Claxton	L. Arch's	CLAXARC@bellsouth.net	478-750-0099
Stephen Duval	MAAI	Sduval@maai.net	478-755-0000
Marie Jones	Macon Parks and Rec	A.Marie.Jones@hotmail.com	478-751-7692
Danny Tavakol	City of Macon Engineering	Danny.Tavakol@macon.ga.us	478-751-7180
MJ Sheehan	MAAI	MJSheehan@maai.net	770-263-5945
Chuck Hasty	GDOT	chuck.hasty@dot.state.ga.us	
Jeff Simmons	GDOT/Urban	jeff.simmons@dot.state.ga.us	
Brad Hale	MAAI	bhale@maai.net	
Ben Hamrick	City of Macon Parks and Recreation	ben.hamrick@macon.ga.us	

PLEASANT HILL NEIGHBORHOOD

I/75 PROPOSAL

ENVIRONMENTAL IMPACT STATEMENT:

EIS IS A NECESSARY COMPONENT TO THE SAFETY IMPROVEMENTS TO I-75/I-16 INTERCHANGE.
IN THE LATE 60'S A LARGE SECTION OF PLEASANT HILL WAS REMOVED TO FACILITATE INTERSTATE 75. CUT IN HALF THERE IS WEST AND EAST PLEASANT HILL. THE WEST ELEVATION IS CONSIDERABLY HIGHER THAN THE EAST ELEVATION AND CONSEQUENTLY A CHANGE IN THE WATER TABLE HAS OCCURRED CAUSING SINK HOLES ON THE WEST SIDE AND POSSIBLE FLOODING ON THE EAST SIDE. THE EIS WAS NOT PERFORMED WHEN I-75 WAS ORIGINALLY CONSTRUCTED, THEREFORE AN EIA(ENVIRONMENTAL IMPACT ASSESSMENT) WILL NOT HAVE ENOUGH INFORMATION REGARDING INITIAL ENVIRONMENTAL IMPACT MUCH LESS THE PROPOSED ADDITIONAL E.I. MIDDLE STREET AND EAST SIDES TO MONROE STREET IS BASICALLY A GHOST TOWN WITH EXCEPTION OF BOOKER WASHINGTON COMMUNITY CENTER.

THE HOMES IN THIS AREA HAVE BEEN SO DEVALUED BECAUSE OF THE I-75 ROADWAY THAT IT BRINGS US TO DISPLACEMENT OF RESIDENTS.

HOME OWNERS

WITH ONLY ONE DISPLACEMENT ON THE WEST SIDE OF I-75, THE MAJORITY OF DISPLACEMENT WILL HAPPEN ON THE EAST SIDE AT MIDDLE STREET, 1ST AVENUE, 2ND AVENUE AND 4TH AVENUE.

HOME OWNERS WHO ARE DISPLACED MUST BE RELOCATED TO COMPATABLE HOUSING IN PLEASANT HILL OR IF NECESSARY BUILD NEW HOUSING WITH HOME OWER INCURRING NO ADDITIONAL MORTGAGE OR FEES, FOR EXAMPLE, PERSONS WHO OWN A TWO BEDROOM HOUSE WITHOUT A MORTGAGE MUST BE RELOCATED INTO A TWO BEDROOM HOME SPECIFICALLY IN BUT NOT LIMITED TO PLEASANT HILL WITH NO MORTGAGE OR FEES. WHEN HIGHER PROPERTY TAXES APPLY, A TAX CREDIT SHOULD BE EXTENDED TO THE HOME OWER FOR THE ADDITIONAL TAXES INCURRED OVER AND AVOVE THE PROPERTY TAXES PAID ON THEIR PREVIOUS PROPERTY TAXES FOR SOME TIME PERIOD (30 YEARS).

ALL HOMES WITHIN CLOSE PROXIMATY OF I-75 ON BOTH SIDES OF THE ROADWAY SHOULD BE COMPENSATED WITH NOISE RESISTANT WINDOWS, INSULATION, BEAUTIFICATION AND LOSS OF PROPERTY VALUE.
ALL HOMES WITHIN 100 YARDS OF THE ROADWAY MUST BE REMOVED AND HOMEOWNERS COMPENSATED OR RELOCATED.

THE BLIGHTED AREA OF MIDDLE STREET, HARDEMAN AVENUE TO FIRST AVENUE, ABANDONDED HOUSES AND APARTMENTS ON THE EAST AND WEST SIDES OF THE STREET MUST BE REMOVED AND REDEVELOPED INTO A LIGHT COMMERCIAL ZONE WITH A BARRIER AT THE END OF FIRST AVENUE TO HARDEMAN AVENUE.

RENTER'S MUST BE RELOCATED TO APPROPRIATE RENTAL PROPERTIES. PHNIG(PLEASANT HILL NEIGHBORHOOD IMPROVEMENT GROUP) REQUESTS THAT GDOT (GEORGIA DEPARTMENT OF TRANSPORTATION) IN COORPORATION WITH MACON HOUSING AUTHORITY WORK TOGETHER THROUGH MHA'S DISPLACEMENT PREFERANCE PROGRAM.

STREET SCAPE/REMOVAL AND UPDATING

DUE TO THE PROPOSED LOSS OF MIDDLE STREET FROM 1ST AVENUE TO 5TH AVENUE ON THE EAST SIDE OF I-75, ALL HOMES BETWEEN MONROE STREET AND I-75 WILL BE IMPACTED TO A GREATER OR LESSER DEGREE AS SHOWN IN YOUR NOVEMBER 21, 2005 PROJECTED INFORMATION BOOKLET. IT IS THE CONSENSES OF THE COMMUNITY THAT THE ENTIRE AREA FROM THE ROADWAY UP TO AND INCLUDING THE DRAINAGE CANAL WHICH MUST BE COVERED FOR SAFETY REASONS AND BE DEVELOPED INTO A GREEN SPACE PARK WITH HISTORIC LIGHTING, BENCHES, SHURBS, BIKE PATH AND CHILDREN'S PLAY AREA. A NEW ROADWAY NEEDS TO BE CUT FROM 5TH AVENUE TO WALNUT STREET CONNECTING WITH WOODLIFF STREET.

ON THE WEST SIDE , THE STREET JOINING 1ST THROUGH 4TH AVENUES, THE PORTION BETWEEN 1ST AVENUE AND 2ND AVENUE SHOULD BE DEVELOPED INTO A GREEN SPACE WITH TREES AND BENCHES, A PROMENARDE LOOK, AND A CUL DE SAC AT THE END OF 1ST AVENUE.

1ST AND 2ND AVENUES MUST BE REPAVED DUE TO EXCESSIVELY LARGE CRACKS IN THE ROADWAY(INVESTIGATE FOR SINK HOLES). REFERENCE EIS.

THE BLIGHTED AREA OF MIDDLE STREET, HARDEMAN AVENUE TO FIRST AVENUE, ABANDONDED HOUSES AND APARTMENTS ON THE EAST AND WEST SIDES OF THE STREET MUST BE REMOVED AND REDEVELOPED INTO A LIGHT COMMERCIAL ZONE WITH A BARRIER AT THE END OF FIRST AVENUE TO HARDEMAN AVENUE.

THE LIQUOR STORE AND CONVIENCE STORE AT MIDDLE STREET AND HARDEMAN AVENUE ARE CONTRIBUTING TO THE BLIGHTED APPEARENCE AND CRIME IN THAT AREA.
THE COMMUNITY STRONGLY ADVISES THAT GDOT INCORPORATE INTO DESIGN A MEANS TO REMOVE THESE BLIGHT CAUSING STRUCTURES.

WALNUT STREET BRIDGE MUST NOT BE CLOSED FOR ANY EXTENDED PERIOD OF TIME. THE CLOSING WILL CAUSE MAJOR TRAFFIC PROBLEMS ON OTHER ARTERIES. THERE MUST NOT BE ANY FURTHER INVASIVE CONSTRUCTION IN THE AREA.
A NEW EAST/ WEST CONVEYANCE IN THE FORM OF A VEHICULAR AND PEDESTRIAN COMBINATION BRIDGE MUST BE ADDED AT THIRD AVENUE ON THE WEST SIDE AND ANGLING TO AND LANDING AT FIFTH AVENUE ON THE EAST SIDE, THUS REPLACING THE EXISTING DAVID LUCAS BRIDGE.

Department of Transportation

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July 21, 2006

NH-16-1(104), Bibb County
I-16/I-75 fm I-75 @ Hardeman Ave to I-16 @ Spring Street
PI No. 311410

Mr. Peter Givens
President – Pleasant Hill Neighborhood Improvement Group
1990 Fourth Avenue
Macon, GA 31201

RE: Pleasant Hill Neighborhood I-75 Proposal

Dear Mr. Givens:

Thank you for taking the time to prepare the "Pleasant Hill Neighborhood I-75 Proposal". The proposal that you submitted via email on April 20, 2006, has been reviewed and listed below are the Department's responses to items presented in your proposal shown in italics.

1. Environmental Impact Statement (EIS)
"EIS is a necessary component to the safety improvements to I-75/I-16 Interchange. In the late 60's a large section of Pleasant Hill was removed to facilitate interstate 75. Cut in half there is west and east Pleasant Hill. The west elevation is considerably higher than the east elevation and consequently a change in the water table has occurred causing sink holes on the west side and possible flooding on the east side. The EIS was not performed when I-75 was originally constructed, therefore and EIA (Environmental Impact Assessment) will not have enough information regarding initial environmental impact much less the proposed additional i.e. Middle Street and east side to Monroe Street is basically a ghost town with exception of Booker Washington Community Center. The homes in this area have been so devalued because of the I-75 roadway that it brings us to displacement of residents."

Response:
This issue has been reviewed by the Georgia Department of Transportation (GDOT) and the Federal Highway Administration (FHWA) and the decision reached is to continue moving this project forward utilizing an Environmental Assessment. In completing an Environmental Assessment, all impacts to the natural and manmade environment will be fully addressed as required by the National Environmental Policy Act (NEPA).

2. Homeowners

"Home owners who are displaced must be relocated to compatable housing in Pleasant Hill or if necessary build new housing with home owner incurring no additional mortgage or fees, for example, persons who own a two bedroom house without a mortgage must be relocated into a two bedroom home specifically in but not limited to Pleasant Hill with no mortgage or fees. When higher property taxes apply, a tax credit should be extended to the homeowner for the additional taxes incurred over and avove the property taxes paid on their previous property taxes for some time period (30 years)."

Response:

The Georgia DOT will provide relocation assistance to any person displaced as a result of the project if requested. Relocation services include assisting displaced individuals with locating comparable replacement dwelling in as close proximity to their current home as possible. Displaced individuals may receive payments for additional costs necessary to purchase comparable replacement housing such as:

- Replacement Housing Payment which is the difference, if any, between the amount paid for the property acquired and the actual cost the homeowner paid for comparable housing.
- Increased Mortgage Interest Costs is reimbursement for increased interest costs if the interest rate on the new mortgage exceeds that of the existing mortgage.
- Closing Costs- homeowners may be reimbursed for reasonable expenses incurred for title search, recording fees and certain other closing costs.
- Individual property owners will be contacted by the Georgia DOT to discuss these items prior to negotiations.

3. "All homes within close proximity of I-75 on both sides of the roadway should be compensated with noise resistant windows, insulation, beautification and loss of property value."

Response:

One of the studies that must be included in the Environmental Assessment document is an assessment of noise impacts due to the construction of the proposed project. Appropriate abatement measures will be implemented where feasible and prudent to minimize impacts associated with noise. In addition, GDOT and FHWA have agreed to consider additional context sensitive solutions such as decorative walls, landscaping, and pedestrian amenities based on further community input.

4. "All homes within 100 yards of the roadway must be removed and homeowners compensated or relocated."

Response:

This suggestion would create an additional 125 displacements within this historic district. Section 4(f) of the USDOT Act requires thorough consideration of avoidance, minimization, and/or mitigation measures for project impacts within historic districts. Since this suggestion substantially increases impacts to this historic district beyond those proposed in the current alternative, we do not believe this suggestion is a feasible minimization alternative under Section 4(f).

5. "The blighted area of Middle Street, Hardeman Avenue to First Avenue, abandoned houses and apartments on east and west sides of the street must be removed and redeveloped into a light commercial zone with a barrier at the end of First Avenue to Hardeman Avenue."

Response:
In accordance with the Georgia Code section 32-2-2(a) (8), the Department does not have the right to purchase properties for any reason other than transportation purposes.

6. "Renter's must be relocated to appropriate rental properties. PHNIG (Pleasant Hill Neighborhood Improvement Group) requests that GDOT (Georgia Department of Transportation) in cooperation with Macon Housing Authority work together through MHA's displacement preference program."

Response:
Displaced tenants will be offered relocation assistance services from a qualified representative employed by the Georgia DOT. The representative is familiar with services provided by other public and private agencies in the community and those services will be utilized to the maximum extent possible.

7. Streetscape/Removal and Updating
"Due to the proposed loss of Middle Street from 1st Avenue to 5th Avenue on the east side of I-75, all homes between Monroe Street and I-75 will be impacted to a greater or lesser degree as shown in your November 21, 2005 projected information booklet. It is the consenses of the community that the entire area from the roadway up to and including the drainage canal which must be covered for safety reasons and be developed into a green space park with historic lighting, benches, shrubs, bike path and children's play area. A new roadway needs to be cut from 5th Avenue to Walnut Street connecting with Woodliff Street."

Response:
The conversion of the area between Middle Street and the drainage canal to a green space will create additional displacements not warranted due to the roadway construction. However, if desired, we will investigate the possibility of covering the area on top of the canal and converting it into a green space area. Please let us know if this option is desirable for future study. An extension of Middle Street connecting 5th Avenue to Walnut Street has been added to the current project alternative for further NEPA analysis.

8. "On the west side, the street joining 1st through 4th Avenues, the portion between 1st Avenue and 2nd Avenue should be developed into a green space with trees and benches, a promenarde look, and a cul de sac at the end of 1st Avenue."

Response:
Conversion of the frontage road between 1st Avenue and 2nd Avenue to a green space and a cul-de-sac has been added to the current project alternative for further NEPA analysis.

9. "1st and 2nd Avenues must be repaved due to excessively large cracks I the roadway (investigate for sink holes). Referenced EIS."

Response:
The repaving of 1st Avenue and 2nd Avenue has been added to the current project alternative for further NEPA analysis.

10. "The blighted area of Middle Street, Hardeman Avenue to First Avenue, abandoned houses and apartments on the east and west sides of the street must be removed and redeveloped into a light commercial zone with a barrier at the end of First Avenue to Hardeman Avenue."

Response:
In accordance with the Georgia Code section 32-2-2(a) (8), the Department does not have the right to purchase properties for any reason other than transportation purposes.

11. "The liquor store and convience store at Middle Street and Hardeman Avenue are contributing to the blighted appearence and crime in that area. The community strongly advises that GDOT incorporate into design a means to remove these blight causing structures."

Response:
The Georgia DOT can only acquire properties required for the construction, operation, and maintenance of the road project. Some of the areas mentioned may be required and some may not. We will continue to work with Pleasant Hill to develop the final plan.

12. "Walnut Street Bridge must not be closed for any extended period of time. The closing will cause major traffic problems on other arteries. There must not be any further invasive construction in the area. A new east/west conveyance in the form of a vehicular and pedestrian combination bridge must be added at Third Avenue on the west side and angling to and landing at Fifth Avenue on the east side, thus replacing the existing David Lucas Bridge."

Response:
During the development of preliminary plans, the GDOT will consider different staging options for the Walnut Street Bridge Replacement that will maximize cost effectiveness and minimize impacts to the traveling public, surrounding businesses and residences. The addition of a bridge crossing from 3rd Avenue to 5th Avenue will create approximately 19 displacements within the Pleasant Hill Neighborhood. This would cause additional avoidable impacts to the National Register Historic District and would not follow the requirements of Section 4(f) of the USDOT Act. See response to item number 4 for additional information regarding the requirements of Section 4(f). Improved pedestrian facilities will be added to the Walnut Street bridge and the David Lucas Pedestrian bridge will be reconstructed in its approximate location.

The Georgia DOT would like to meet with the Pleasant Hill Community within three weeks to discuss these responses and to present a design alternative that incorporates some of the requested items listed in the proposal. With your help, we will make the necessary arrangements and send out flyers to everyone in the Pleasant Hill Neighborhood. A Public Information Open House will then be scheduled this Fall to present the preferred design alternative.

Again, I want to thank you for taking the time to prepare this proposal and for working with the Georgia DOT on this important project. If you have any questions, please feel free to contact the Project Manager, Mrs. Theresa Holder, at (404) 656-5444; Mr. Glenn Bowman or myself at (404) 656-5436.

Sincerely,

James B. Buchan, P.E.
State Urban Design Engineer

JBB:TRH
cc:
Ward Edwards, DOT Board Member
Honorable Jim Marshall, Representative
Honorable C. Jack Ellis, Mayor
Ms. Anita Ponder, Macon City Council
Buddy Gratton
Harvey Keepler

ATTACHMENT #9

LOCAL GOVERNMENT MEETING MINUTES

CITY OF MACON - RAILROAD RELOCATION MEETING
NOVEMBER 20, 2001

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 2:00 PM
Location: Macon City Hall – Mayor's Conference Room

Attendees:

Mayor Jack Ellis	Mayor - City of Macon
Commissioner Tommy Olmstead	Bibb County Commission Chairman
Mr. David Lucas	Georgia General Assembly (Chairman of Delegation)
Mr. David Graves	Georgia General Assembly – Member
Mr. Robert Reichert	Georgia General Assembly – Member
Mr. Ken Birdsong	Georgia General Assembly – Member
Ms. Nikki Randall	Georgia General Assembly – Member
Mr. Emery McClinton	Georgia State Transportation Board Chairman
Mr. Ben Porter	Department of Natural Resources (DNR)
Mr. Bill Causey	City of Macon Engineering
Mr. Melvin Waldrop	Macon Chief Administrative Officer
Mr. Joseph Palladi	GDOT- Urban Design Engineer
Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mrs. Genetha Rice-Singleton	GDOT- Urban Design Project Manager
Mr. Roy Fickland	Georgia Passenger Rail Authority
Dr. Kirby Godsey	President- Mercer University; Newtown Macon
Mr. Chris Sheridan	Newtown Macon
Mr. Conie Mac Darnell	Newtown Macon
Mr. Joseph Passonneau	Passonneau Engineering (in assoc. with Newtown Macon)
Mr. Gene Dunwody	Macon Citizen
Mr. Tom Moreland	Moreland Altobelli- President
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager
Mr. Van Etheridge	Moreland Altobelli- Macon TIP Program Manager
Mr. James Conner	Moreland Altobelli

Note: The above list includes active participants in the meeting. Several people present at the meeting may not be listed above.

CITY OF MACON - RAILROAD RELOCATION MEETING NOVEMBER 20, 2001

Meeting Highlights

The following are highlights from the above referenced meeting. Unless otherwise noted, individual statements outlined in this document are not exact transcriptions from the meeting and under no circumstances should be referenced as such in any other document.

The purpose of this meeting was to determine whether or not an additional railroad relocation analysis could be completed without compromising the above referenced interstate improvement project schedule. The study would address the feasibility of relocating the Norfolk Southern Railroad from the southwest side of the Ocmulgee River to the northeast side of the river between the I-16/I-75 interchange and Coliseum Drive.

The meeting was opened by Mayor Jack Ellis. Following a round of introductions, Mayor Ellis and Commissioner Olmstead (Bibb County Commission Chairman) both expressed that they would only support further study of the railroad relocation if it would not cause delay to the interstate improvements.

The focus of the meeting then shifted toward Newtown Macon and their proposal to relocate the Norfolk Southern "H" line. Mr. Chris Sheridan stated that they agreed that the interstate project should move forward, but would prefer a design that would not preclude future rail re-alignment. Mr. Sheridan also noted that, as a resident of the Shirley Hills neighborhood, he was also concerned about noise impacts from the proposed interstate project.

Mr. Passonneau was introduced as the engineer retained by Newtown Macon to develop a concept for relocating the "H" line. He began by giving an historical overview of transportation in the United States. He described transportation projects of comparable scale to the I-16/I-75 interchange improvements for which he has provided engineering services in the past. Mr. Passonneau thanked both GDOT and Moreland Altobelli for providing him with any requested information and answering correspondence in a timely manner. He commented that the proposed interstate project was very well planned and engineered. It would safely and economically provide access at three closely spaced urban interchanges. He noted that the current trend for interstate highways in urban areas, however, is to depress the highway with cross roads overtop rather than the opposite which currently exists in Macon. The advantages of a depressed interstate would be reduced noise and visual impacts to the surrounding communities.

Mr. Passonneau explained that his proposal for relocating the railroad to the other side of the Ocmulgee River would require lowering I-16 and raising Spring Street to span over the interstate. The railroad would run parallel to the interstate at approximately the same grade. This would achieve the least possible noise & visual impacts from both the interstate and the railroad. Perspective displays showing both alternatives for I-16 - GDOT's concept and Mr. Passonneau's proposal – were referenced at this point. Mr. Passonneau finished his presentation by stating that this was the only feasible alternative

for relocating the railroad, and that future relocation would not be possible unless the interstate project were modified as described above.

Mr. Joseph Palladi, GDOT's State Urban Design Engineer, was then asked by Mayor Ellis to give a status of the interchange project and the Department's position concerning the rail study. Mr. Palladi began by saying that he was not here to tell the city of Macon what to do, but to explain the consequences of their decision. Mr. Palladi described the need and purpose for the proposed interstate improvements. He mentioned that the I-16/I-75 project had everything you never want to see on a highway project – cemeteries, wetlands, Native American traditional cultural property (TCP), historic sites, major utilities, etc.. In an effort to address the community's concerns proactively, the project team coordinated with a local advisory committee while developing design alternatives and selecting a preferred concept. In order to address comments from the advisory committee concerning relocation of the "H" line, a feasibility study was prepared by the design consultant (Moreland Altobelli). This study analyzed the following alternatives:

- Relocating the "H" line to the north side of the river
- Enclosing the existing "H" line in structure with greenway overtop
- Improving the existing "S" line to handle traffic from the "H" line
- Relocating the "H" line on new location outside of the project area

Mr. Palladi emphasized that relocation and/or reconstruction of the "H" line would not be included as part of the interchange project, but if necessary, the interchange project would be designed not to preclude it. He noted that Mr. Passonneau's proposal would require temporary closure of the I-16/Spring Street interchange for a period of up to two years. Commissioner Olmstead and Mayor Ellis both expressed that closure of this interchange was unacceptable. Mr. Palladi finished by saying that an alternate concept for the I-16/I-75 interchange *could* be engineered per Mr. Passonneau's proposal, but it would delay the project at least another year and would substantially increase construction cost.

Mr. Tom Moreland noted that the I-16/I-75 interchange was a federal aid project, and that the funding had a limited "window of opportunity". Missing this window of opportunity could postpone the project indefinitely. In addition to re-engineering the project concept, the project's environmental document would have to be over-hauled. Starting the environmental process over could create new roadblocks for the project that did not exist before.

Mr. Brad Hale, consultant engineer for the I-16/I-75 improvements, added that the "H" line would need to be raised approximately 15 feet above it's existing elevation in order to clear-span the Ocmulgee River during a 100-year flood event. Raising the railroad at this location would require raising the grades of several of the ramps in the I-16/I-75 interchange. Mr. Passonneau agreed with Mr. Hale's assessment.

Mr. Olmstead again stated that the interchange project needed to move forward without delays. Mr. David Lucas, representative from the Georgia General Assembly, asked if it were possible to proceed with a "two-pronged" approach – continuing with the

interchange project as-is while completing additional studies for the railroad concurrently. Mr. Palladi responded that it would require doubling the efforts of the consulting team and asked if Moreland Altobelli had the necessary resources. Mr. Hale responded that the MA-HNTB team could complete the additional railroad study without delaying the interstate project unless, as a result of the study, the interchange had to be re-configured as described by Mr. Passonneau.

At Mr. Lucas' request, Mr. Ellis, Mr. Olmstead, Mr. Godsey, Mr. Palladi and Mr. Moreland retreated to a private room to discuss the matter further. When the meeting re-adjourned, Mr. Lucas stated that due to the importance of keeping the I-16/I-75 interchange project on schedule, his recommendation to Mayor Ellis and Chairman Olmstead would be to continue the interchange project without further study of the railroad relocation. Mayor Ellis and Commissioner Olmstead concurred, and Mayor Ellis requested to Mr. Palladi that the I-16/I-75 project continue without delay.

Macon Council Meeting Minutes
February 11, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 5:00 PM
Location: Macon City Hall

Macon City Government Officials Attending:

Council Member Brenda Youmas	Macon City Council-Ward 1
Council Member Melvyn J. Williams	Macon City Council-Ward 1
Council Member Elaine Lucas	Macon City Council-Ward 1
Council Member James E. Timley	Macon City Council-Ward 2
Council Member Jim Lee	Macon City Council-Ward 2
Council Member Ed DeFore	Macon City Council-Ward 2
Council Member Anita J. Ponder	Macon City Council-Ward 3
Council Member Alveno Ross	Macon City Council-Ward 3
Council Member Henry C. Ficklin	Macon City Council-Ward 3
Council Member Charles Jones	Macon City Council-Ward 4
Council Member Charles Dudley	Macon City Council-Ward 4
Council Member Filomena T. Mullis	Macon City Council-Ward 5
Council Member F. Stebin Horne III	Macon City Council-Ward 5
Council Member W.M. Dickey	Macon City Council-Ward 5
Mayor C. Jack Ellis	Mayor City of Macon

GDOT/Consultant Attendees:

Mr. Joseph Palladi	GDOT - State Urban Design Engineer
Mrs. Genetha Rice-Singleton	GDOT - Urban Design Project Manager
Mr. Brad Hale	Moreland Altobelli - Project Manager
Mr. M. J. Sheehan	Moreland Altobelli - Highway Design
Mr. Van Etheridge	Moreland Altobelli - Macon Office
Mr. Joe Johnson	Moreland Altobelli - Macon Office
Ms. Liz Sanford	Sycamore Consulting, Inc.

Other Attendees per sign in sheet (attached)

Meeting Highlights
The following are highlights from the above referenced meeting. Unless otherwise noted, individual statements outlined in this document are not exact transcriptions from the meeting and under no circumstances should be referenced as such in any other document.

Macon Council Meeting Minutes
February 11, 2003

Macon City Council President Anita Ponder opened the meeting by explaining why the meeting was called. Citizens have expressed concerns with the Georgia Department of Transportation's (GDOT's) proposal for improving the I-16/I-75 Interchange. City Council work sessions produced a resolution for GDOT to consider other alternatives. This resolution was tabled until GDOT could present the proposed design to the council. Council member Ponder requested that attendees hold all questions and comments until after the presentation by Mr. Joe Palladi.

Council Member Lucas stated that everyone is concerned about improving safety on I-16 and I-75, and requested that the presentation be given in a timely manner to allow everyone the opportunity to be heard.

Mr. Joe Palladi began by presenting each of the council members with a packet of information. *The following handouts were provided in the information packet:*

- *Outline of the project need and purpose*
- *Accident statistics for 1997 shown graphically on a road map*
- *Synopsis of all public involvement activities undertaken by GDOT*
- *Citizen's Advisory Committee member list*
- *Breakdown of comments received from two public information meetings*
- *Project information fact sheet (incl. accident data and level of service)*
- *Noise fact sheet and projected noise levels in Shirley Hills*
- *Interchange comparison chart (I-16/I-75 vs. I-85/I-285)*
- *Frequently asked questions*

Mr. Palladi mentioned that the project location has 'everything you never want to see on a transportation project', including cemeteries, wetlands, a floodplain, railroads, major utilities, existing and proposed parks, a national monument, and Native American Traditional Cultural Property (TCP). The preferred concept alternative was designed to improve traffic operations & safety while minimizing impacts to these resources.

A Citizen's Advisory Committee (CAC) played an integral role in the development of the preferred concept alternative. GDOT initially presented the CAC with an empty base map of the project area and asked committee members to identify problem areas and the community's goals for the project. Problems identified included sight distances, traffic weaves, congestion, and high accident/fatality rates.

Public information meetings were held on November 16, 1999, and October 24, 2000.

In neighborhood meetings, the project was generally favored. Meetings occurred with the Golden Kiwanis, the Macon Exchange Club, Shirley Hills, Pleasant Hill, and Winship Hills.

Public outreach for this project also included a web site (www.i16i75.com), newsletters, and information kiosks.

In addressing the comparison made to the I-85/I-285 interchange in NE Atlanta, Mr. Palladi indicated that this project would be much smaller. A handout in the council member's information packet included direct comparisons between the two interchanges (cost, elevations, etc.)

Mr. Palladi noted that six design alternatives were developed based on the CAC's initial goals. Following input from the CAC, the preferred concept alternative (alternative number seven) was developed based on the positive elements from the previous designs.

Following FHWA approval of the preferred concept alternative, the following will occur: 1) A public hearing will be held in Macon. 2) The draft Environmental Assessment (EA) will be submitted to FHWA for approval. 3) Preliminary plans will be developed. 4) Right-of-way acquisition will commence following approval of the preliminary plans.

Mr. Palladi committed to listen to community representatives and said he could be reached at (404) 656-5446 or via email at Joe.Palladi@DOT.STATE.GA.US.

Council Member Williams asked if it were still possible to make changes to the design. Mr. Palladi responded that while changes can still be made, no other alternatives have been suggested or developed that address traffic, safety, operations and the need & purpose of this project.

Council Member Williams also asked where GDOT proposed to install 20-foot high noise walls. Mr. Palladi indicated that 51% of people at Public Information Meeting expressed concern over current and future noise from the interstate. A noise barrier is currently proposed along westbound I-16 (adjacent to Shirley Hills).

Council Member Youmas noted that everyone agrees that improvements are necessary, however, most would prefer an alternative plan. Mr. Palladi responded that the project started with six alternatives and, with help from the CAC, a preferred concept alternative was developed. Alternatives on a new location would start the planning and engineering process over and would delay construction.

Council Member Lucas asked if project could be scaled down without compromising safety. Mr. Palladi responded that a 'scaled-down' project would not meet safety and operational requirements.

Council Member Lucas asked how much the project would cost. Mr. Palladi responded that the estimated construction cost for the I-16/I-75 interchange (phase 1) is $79 million. The total of all construction and right-of-way for the improvements to I-16 and I-75 (in this area) is estimated at $202 million. The project will be broken up into four phases.

Council Member Lucas asked who has the final say concerning the interchange concept. Mr. Palladi responded that FHWA would have to approve the concept, the environmental document, and the interchange modification report.

Council Member Lucas said she would personally like to see project scaled down. She noted that representatives from several neighborhoods have complained that they have not had sufficient input in the design process.

At this point, community members were allowed to comment on the project and ask GDOT questions. Their comments are outlined below.

Mr. Brian McDavid, a resident of Shirley Hills, complained that GDOT has had no input from the citizens of East Macon. He had been appointed to the Citizen's Advisory Committee two years ago, but still has not been invited to any meetings.

Mr. Rick Hutto, also a resident of Shirley Hills, said GDOT refused to meet with him until a meeting was called with FHWA. In explaining the project to him, an engineer had commented, "This is why we went to college and got degrees". He accused GDOT of providing selective and sometimes misleading information. He went on to say that the planned interchange is 240 ft. wide, wider than the Tom Moreland Interchange.

Mr. Daniel Sikes noted that he travels through the interchange every day. He believes that GDOT has problem with communication. He suggested that the City Council and the County Commission review all of the Macon projects together. He also suggested that GDOT consider a bypass to the East of Macon to reduce truck traffic and the associated noise.

Mr. Lindsay Holliday presented an alternative to relocate I-16 to the proposed route of the Fall Line Freeway south of downtown Macon. He stated that this alternative would alleviate existing flooding problems in downtown Macon and eliminate the need for improvements to the levee. Mr. Holliday finished by saying (while pointing to Mr. Palladi) "You work for us! When we tell you what we want, you do it because we're paying you!"

Mr. Palladi responded that an alternative project (such as the one proposed by Mr. Holliday) would have to go though the planning process and be recommended by the local Metropolitan Planning Organization (MPO) before he could design it. He further stated that no traffic study or environmental assessment has been presented to support this alternative.

Ms. Amy Devers, a Shirley Hills resident, said that GDOT's work in Atlanta has only created bigger roads with bigger accidents. Better enforcement is needed to reduce accidents on the interstates in Macon, not roadway improvements. She is also concerned that the proposed sound barriers will cut off the view of Macon from the interstate.

Ms. Susan Hanberry said the Citizen's Advisory Committee for the local MPO has not approved the BIBB County transportation plan. She believes many of these projects are a waste of the taxpayers' money. She complained that one of the engineers could not explain what a decibel was. She requested that GDOT use non-reflective noise abatement in front of Shirley Hills, such as terraced & landscaped barriers. She asked why the environmental document for this project was an EA rather than an EIS, given the number of environmentally sensitive areas noted by Mr. Palladi earlier.

Mr. Palladi responded that the draft environmental document would be reviewed by FHWA. If the project is found to have a significant impact, then the document will change to an EIS.

Ms. Mary McCullough asked how long the project would take to build.

Mr. Palladi responded that construction should take 3-5 years.

Mr. Greg Williams noted that GDOT's plan affects the entire city, and that all citizens should have input in the feasibility process. He suggested better signage on I-75. He asked who picked the CAC members.

Mr. Palladi responded that the CAC members were selected by GDOT based on input from the county commission and the mayor's office.

Mr. Nick Pietrzak, a resident of Winship Hills, said GDOT limited the discussion with his neighborhood to the proposed interchange improvements and did not go into detail about the proposed number of lanes. All of the design alternatives presented by GDOT had the same number of bridges over Ocmulgee River. He does not believe GDOT cares about the impact the project will have on Macon.

Mr. Walt Austin, a North Highlands resident, asked the following questions:

1) How much will the proposed project reduce in accident rates?
2) Did the traffic model consider the Fall Line Freeway?
3) Would residents of Shirley Hills be compensated for property devaluation?

Mr. Austin finished by stating the interstate should be re-aligned to provide better access to the Macon Airport.

Mr. Palladi responded that while accident rates couldn't be predicted, a reduction in accident rates would be expected based on his experience with similar projects. The traffic model for the I-16/I-75 interchange includes changes in traffic due to the proposed Fall Line Freeway. State law allows reimbursement to property owners only when a physical impact occurs to property. Noise Barriers are part of the commitments made in the environmental document to decrease impacts.

Mr. Tom Sebastian expressed concern over traffic congestion on the local streets. He asked, "Who's responsible for traffic after it leaves the interstate?"

Mr. Palladi stated that GDOT is responsible for all roadways that are designated as state routes.

Mr. Lee Martin asked the following questions:

1) Does Moreland Altobelli, the design consultant for this project, now employ the engineer who designed the existing I-16/I-75 interchange?
   Mr. Palladi responded that the engineer who designed the I-16/I-75 interchange in the 1960's did work for Moreland Altobelli after retiring from GDOT, but is not associated with the design of this project.
2) Why is every environmental document either a FONSI or No-Build?
   Mr. Palladi explained that the Environmental Assessment (EA) could be changed to an Environmental Impact Statement (EIS) if there are significant impacts. A FONSI documents the impacts due to the proposed construction and mitigation efforts.
3) Did the CAC approve the preferred concept alternative for the I-75/Pierce Avenue interchange project?
   Mr. Palladi responded that the purpose of the CAC is to make recommendations. It is GDOT's responsibility, however, to ensure that these recommendations meet safety requirements and the project need & purpose before they are implemented. The CAC for the I-75/Pierce Avenue project voted in favor of an alternative that GDOT later determined to be undesirable.

An unidentified member of audience suggested that a representative from FHWA attend future meetings so GDOT does not act on their behalf.

Mr. Palladi noted the FHWA representative for this project recently commented that this project has had the most extensive public involvement of any project she has reviewed.

Council Member Ponder closed with the following questions:

1) What does 'going back to Step 1' mean with respect to time?
2) Is there an alternative to the current design that might work?

Mr. Palladi stated that the need for the I-16/I-75 and Fall Line Freeway projects would be have to be reassessed, backing the process up several years, if a new location or bypass alignment was considered. To date, no alternative design has been submitted to him with supporting data related safety, operations, or impacts.

Macon Council Meeting Minutes
February 11, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 5:00 PM
Location: Macon City Hall

Sign up for I-16/I-75 Improvement Project Mailing List-

Name:	Address		
Robby Gibbs	3651 Christopher Dr.	Macon, GA	31216
James T. Davis	1350 Waverland Dr.	Macon, GA	31211
Paula H. Davis	1350 Waverland Dr.	Macon, GA	31211
Rick Hutto	1269 Jackson Springs Rd.	Macon, GA	31211
Fred & Sylvie Utick	1620 Waverland Dr.	Macon, GA	31211
Diane Mitchell	1840 Twin Pines Dr.	Macon, GA	31211
Bobby Mills	936 Curry Dr.	Macon, GA	31211
Sue Mills	936 Curry Dr.	Macon, GA	31211
Frank Graham Jr.	1767 Hawthorne Rd.	Macon, GA	31211
Catherine Sevars	1658 Waverland Dr.	Macon, GA	31211
Tom Sebastian	796 North Ave.	Macon, GA	31211
George Youmans	1151 Oakcliff Rd.	Macon, GA	31211
Al Gerhardt	626 College St.	Macon, GA	31201
Barbard Littlefield	571 Corbin Ave.	Macon, GA	31201
Victor Jones	2987 Crestline Dr.	Macon, GA	31204
Erin Lewis	P.O.Box 6437	Macon, GA	31208-6437
Gigi & Palmer Rolfes	1178 Jackson Springs Rd.	Macon, GA	31211
Daniel Sikes	206 Loraine Woods Dr.	Macon, GA	31210
Gloria Hutchings	557 Monroe St.	Macon, GA	31211
Amanda & James Upshaw	1053 Nottingham Dr.	Macon, GA	31211
J. H. Webb	1184 Oarclipf Rd.	Macon, GA	31211
Jim Barfield	1184 Oarclipf Rd.	Macon, GA	31211
Maryel Bath	348 College St.	Macon, GA	31201
Donald Johnson	1310 Twin Pines LN.	Macon, GA	31211
Bill Wikle	415 Oak St.	Macon, GA	31201
Bill Causey	682 Cherry St.	Macon, GA	31202
Dave Thornton	P.O.Box T	Macon, GA	31202
Eugene Donwody	Box 306	Macon, GA	31202
Ken Haynie	1290 Jackson Springs Rd.	Macon, GA	31211
Lynda Haynie	1290 Jackson Springs Rd.	Macon, GA	31211
Walt Austin	911 Boulevard	Macon, GA	31211
MaryKay McCullough	1045 Boulevard	Macon, GA	31211
Terry McCullough	1045 Boulevard	Macon, GA	31211
Dan Fisilr	489 Asherlle Dr.	Macon, GA	31210
Sandy Bush	3269 Misty Valley Dr.	Macon, GA	31204
Gary Schultz	253 Albermarle Pl.	Macon, GA	31204
Susan Hanberry	4831 Guerry Dr.	Macon, GA	31201
Lee Martin	1395 Georgia Dr.	Macon, GA	31201

Amy Griffith Deaver	1985 Waverland Dr.	Macon, GA	31211
Tommy Jean Griffith	1907 Waverland Dr.	Macon, GA	31211
Jerry & Amanda Ehey	1935 Waverland Dr.	Macon, GA	31211
Lois McLain	1806 Lullwater Pl.	Macon, GA	31211
Alice Sheridan	1450 Lone Oak Dr.	Macon, GA	31211
Mary E. Sheridan	742 Tidewater Ctr., 19F	Macon, GA	31211
Deborah Mooney	807 Boulevard	Macon, GA	31211
Merry Bacon	807 Boulevard	Macon, GA	31211
James Haskins	1125 Nottingham Dr.	Macon, GA	31211
Marilyn Stamps	1127 OakCliff Rd.	Macon, GA	31211
Rebecca Ranken	116 Jackson Springs Rd.	Macon, GA	31211
Jane Claxton	1183 Jackson Spring Rd.	Macon, GA	31211
John Wood	1130 S. Jackson Springs Rd.	Macon, GA	31211
Mary H. Sims	1175 Jackson Springs Rd.	Macon, GA	31211
Richard White	1182 Oakcliff Rd.	Macon, GA	31211
Ed Bond	Bibb Co. Coroner		
Brian McDavid	3 W. Jackson Spring Rd.	Macon, GA	31211
Lindsay Holliday	360 Spring St.	Macon, GA	31201
Willis C. Brook	948 McCall Rd.	Macon, GA	31217
Greg Williams	686 Edgewood Ave.	Macon, GA	31201-2248
Rufus Jones Jr.	1423 Berena Vista Dr.	Macon, GA	31204
N. Pietrzak	574 Pinecrest Rd.		
Lenore & Ed Sell	387 Hines Terrace	Macon, GA	31204
Lilly Ambrose	930 Laurel Ave.	Macon, GA	31211
Tim Thornton	P.O. Box T	Macon, GA	31202
Mary & Earl Farriba	1391 Briarcliff Rd. 18b	Macon, GA	31211
Louis Philhower	1180 Oakcliff Rd.	Macon, GA	31211
Kathy Hawkins	1239 Jackson Springs Rd.	Macon, GA	31211
Claude & Kay Remington	1161 Nottingham Dr.	Macon, GA	31211
Frank & Omega Wood Grove	1291 Briarcliff Rd. Unit 1B	Macon, GA	31211
M/M Samuel P. Jones	1193 Oakcliff Rd.	Macon, GA	31211
Dr. & Mrs. Donald W. Rhane	1181 Oakcliff Rd.	Macon, GA	31211
Bea Ross	264 College	Macon, GA	31201
Tom & Mary Anne Richardson	596 College St.	Macon, GA	31201
Janis Hally	148 Oakhaven Ave.	Macon, GA	31204
Hannah Greene	1391 Briarcliff Rd., # 20-B	Macon, GA	31211
Margaret Liles	1391 Briarcliff Rd.,#20-A	Macon, GA	31211
Betty E. Miller	1391 Briarcliff Rd., #8-A	Macon, GA	31211
Ray Domimy	4747 Cheryle Ann Dr.	Macon, GA	31210
John Wilson	2340 Clayton St.	Macon, GA	31204
Paul R. Knight	5650 Kentucky Downs Dr.	Macon, GA	31210
Angela Trunzo	249 Corbin Ave.	Macon, GA	31204

I-16/I-75 Improvement Project
Macon City Council Meeting
Macon, GA
July 27, 2005
5:00 – 6:30 pm

Attendees:
Ben Buchan, GDOT
Glenn Bowman, GDOT
Buddy Gratton, GDOT
Theresa Holder, GDOT
David Millen, GDOT
Ward Edwards, GDOT Board Member
Gus Shanine, FHWA
Don Tussing, Macon MPO
Brad Hale, MAAI
Van Etheridge, MAAI
Anita Ponder, Macon City Council
Rick Hutto, Macon City Council
Brenda Youmas, Macon City Council
Willette Hill-Chambliss, Macon City Council
Alveno Ross, Macon City Council
Joyce Humphrey, Macon City Council

Discussion Summary

Ms. Ponder opened the meeting by stating that this was a council work session and was not opened to the public for questions. It is an informal session to brief council members on the I-16/I-75 project.

Mr. Buchan gave a general overview of the project's location and background. He explained the needs for the project, which are to improve safety; to reduce congestion; and to improve hurricane evacuation. He also gave a summary of the project history beginning with its inclusion in the program, the meetings with the Citizen's Advisory Committee; alternatives that were studied; and the current alternative # 9. He stated that the needs of the project must be weighed with the environmental impacts; some of the impacted communities included Pleasant Hill, Shirley Hills and Linwood Cemetery. He stated that the Department is committed to mitigating these impacts. He proceeded to show examples of different wall types that had been done across the country and various pedestrian bridges. He stated that the next step is for the Department to meet with the impacted communities to determine their desires as far as mitigation.

Questions/comments from council members:

Mr. Rick Hutto

Mr. Hutto began his statements by saying that all GDOT employees are dishonest except for Board Member Edwards. He stated that since the 2-½ years that he has been working on this issue, GDOT has not considered the safety issues. He stated that if the interstate is so dangerous, what has GDOT done to alleviate the problems. Have they added one sign? He answered no and stated that Joe Palladi said at another CAC meeting, that the project was set in stone. He asked when did

GDOT contact the Pleasant Hill Community. He stated that the amenities that were shown in the presentation have not been designed in Georgia. He also stated that according to GDOT's matrix of alternatives that were presented at the November CAC meeting, the McCollough alternative rated higher. He also stated that Historic Macon voted unanimously not to build the project. He again reiterated that GDOT staff is dishonest.

Brenda Youmas

When is the scheduled date to meet with the Pleasant Hill Community?
Mr. Buchan responded that it would be early fall – September.

Can the citizens give input on the design and the mitigation?
Mr. Buchan stated that they can do both.

Ms. Youmas also requested that the city council be notified of the neighborhood meetings. The city council could use their resources to ensure that citizens are notified of the meetings.

She also asked Mr. Buchan to describe the public process.
Mr. Buchan stated that we would meet with targeted communities to discuss the impacts of the proposed project and get their needs/desires established.

What about advertisement?
Mr. Buchan stated that for the neighborhood meetings, we would coordinate through community leaders/ neighborhood associations. For the PIOH and the PHOH, the advertisements are dictated by regulations and law.

Willette Hill-Chambliss

Ms. Chambliss requested that a broad advertisement be done for the CAC meetings.

Alveno Ross:

Has FHWA approved this alternative?
Mr. Gus Shanine was introduced and he stated that FHWA has accepted alternative #9 as the engineered preferred design. He stated that this is the design that will move forward in the NEPA process.

Anita Ponder

Ms. Ponder requested that GDOT be more specific about the impacts.
Mr. Hale explained that there would be 11 displacements along Middle Street and that there would be no physical impacts on the Lynnwood Cemetery.

I-16/I-75 Improvement Project
Board of Commissioner's Meeting

Bibb County Court House
July 27, 2005
11:00 am – 12:00 pm

Attendees:
Ben Buchan, GDOT
Glenn Bowman, GDOT
Buddy Gratton, GDOT
Theresa Holder, GDOT
Thomas Howell, GDOT
David Millen, GDOT
Ward Edwards, GDOT Board Member
Don Tussing, Macon MPO
Charles Bishop, Bibb County Commissioner
Joe Allen, Bibb County Commissioner
Ken Sheets, Bibb County Engineer
Brad Hale, MAAI
Van Etheridge, MAAI
Joe Wood, MAAI

Discussion Summary

Mr. Buchan gave a general overview of the project's location and background. He explained the needs for the project, which are to improve safety; to reduce congestion; and to improve hurricane evacuation. He also gave a summary of the project history beginning with its inclusion in the program, the meetings with the Citizen's Advisory Committee; alternatives that were studied; and the current alternative # 9. He stated that the needs of the project must be weighed with the environmental impacts; some of the impacted communities included Pleasant Hill, Shirley Hills and Linwood Cemetery. He stated that the Department is committed to mitigating these impacts. He proceeded to show examples of different wall types that had been done across the country and various pedestrian bridges. He stated that the next step is for the Department to meet with the impacted communities to determine their desires as far as mitigation.

Questions from audience:

How do you get from I-16 westbound to Hardeman?
Brad Hale explained that you would have to exit onto the WB CD on I-16 near MLK to get to Hardeman Ave.

Will the citizens of Bibb County be able to decide which walls will be chosen? Yes

Are there any off ramps on 2nd Street? Yes

Why isn't the Holliday alternative presented as one of the alternatives that were studied? The Holliday alternative saved the project. DOT did not convey this alternative correctly.

Brad Hale explained that the design team took the footprint from I-16 and the I-16/I-75 interchange based on the current right of way limits as explained by Mr. Holliday and transferred it to Eisenhower Parkway to determine the impacts. With this alternative, a minimum of 128 parcels would be impacted. Based on the number of impacts, an in-depth study was not pursued by the design team.

General Comments from audience:

- Second Street will become a parking lot with the proposed signals.
- Knotting Hill Drive has problems with sound; the air-braking from the trucks makes a lot of noise.
- Air quality should be an impact.
- Proposed plan will kill tourism. Plan is not best for the community.
- The North Highlands community was never contacted.
- The project has been railroaded through the CAC. MAAI gets paid on how big the project should be. DOT has not met the spirit of the law.

- MATS has not included project in TIP because of environmental impacts, environmental justice, and public involvement- Geometry is important but quality of life is too.

- The LRTP does not predict any population growth thru 2030 for Macon.

Comments from Commissioner:

- The commissioner stated that something has to be done with present interchange and that we must move forward with whatever solution is best. A barrier that is atheistically pleasing at River Front is recommended.

- There needs to be another river crossing.
- An agreement with the Native Americans to extend Eisenhower Parkway to I-16. This should not be confused with the Fallline Freeway.

I-16/I-75 IMPROVEMENT PROJECT
Macon Chamber of Commerce Presentation

July 28, 2005 - 12:00 p.m.

AGENDA

Agenda Item	Time	Lead
1. Project Overview - Project Need & Purpose (incl. crash statistics, traffic projections) - Project History (incl. public involvement process) - Proposed Improvements (brief description and powerpoint presentation w/ 3-d perspectives)	12:00 to 12:10 pm (10 min)	Ben Buchan, State Urban Design Engineer
2. Mitigation options - Noise abatement alternatives (powerpoint). - Architectural features/options for bridges and walls (powerpoint). - Community enhancement options (powerpoint – pedestrian bridge option, Pleasant Hill options)	12:10 to 12:20 pm (10 min)	Ben Buchan, State Urban Design Engineer
3. Next Steps for Design Process	12:20 to 12:25 pm (5 min)	Ben Buchan, State Urban Design Engineer
4. Question & Answer Session	??	Ben Buchan, Brad Hale (if necessary)

ATTACHMENT #10

MISC. MEETING MINUTES

I-16 / I-75 Improvements
Local Group Meeting Summary

Date: June 22, 2000

Group: Macon Exchange Club

 # Of Attendees: 106

Summary:

Mr. Joseph Palladi spoke at the weekly meeting of the Macon Exchange Club. He explained his position with GDOT and described the I-16/I-75 Improvement Project.

Mr. Palladi explained that the purpose of attending meetings such as the Exchange Club was to provide information and to get feedback from the community.

There were several questions after Mr. Palladi's presentation. These included:

- Why is the project scheduled so far in the future? We need it tomorrow.
- Road rage is a problem and senior citizens not knowing which way to go. The signs are confusing. More signs on the pavement would help to show speed limits and directions.
- As a former pilot, auto pilot systems might help.
- What is the status of the Sardis Church/I-75 interchange?
- How many lanes are planned for I-75 from Pierce Ave. to Arkwright? Is there enough right-of-way?
- What is the length of construction?
- What are the target dates for the Hartley Bridge Road?
- Why is the work on Sardis Church scheduled before Hartley Bridge?
- What are the poles with cameras for on the interstate?
- Are I-475 and Zebulan Road included in this project?
- In order to address the lighting issue around the Indian mounds, why not turn the lights off when there is an event?
- How would a feeder or collector lane for I-16 work?
- What about lighting at the Coliseum?

Mr. Palladi addressed each of these comments and encouraged them to complete the comment form, call the hotline or the website to provide additional input.

Action Items: N/A

D R A F T
I-16 / I-75 Improvements
Local Group Meeting Summary

Date: September 14, 2000

Group: Commission on Macon-Atlanta Rail (COMAR)

# of Attendees: 19 sign-ins (see attached) including several State Senator staff

Summary:
The I-16/I-75 Improvement Project team was invited to the September meeting of the Commission on Macon-Atlanta Rail (COMAR). Mr. Ed Sell, Chairman of COMAR, opened the meeting with introductions. A discussion of New Business included a progress report on the Inter-City Rail from Mr. Mather Stapleton, and a report on Atlanta Passenger Rail progress from City of Atlanta Councilman Doug Alexander.

Next Mr. Joe Palladi provided an overview of the I-16/I-75 project explaining how rail and roads are interrelated. He also acknowledged that this particular project has everything you don't want to see in a project including historic and other cultural sites, a river, floodplain and utilities. The need and purpose of the project is to improve safety and access in this area and to reduce congestion.

Mr. Palladi informed the group about the public involvement activities. He talked about the first public meeting where the Department took a different approach by displaying "blank" aerials and asking the community what they want. Interviews were held with local stakeholders to gain more insight to local needs and to identify participants in a citizens advisory committee.

This advisory committee is comprised of members from commerce and government. A list of current committee members was distributed. Mr. Palladi explained the role of the advisory committee and the outcome of their last three meetings. He explained the process that the committee took in evaluating seven design alternatives and the selection of a preferred concept. This preferred concept is about 85 percent complete and will be discussed at the next committee meeting to be held on September 28, 2000.

At this point Mr. Palladi explained how the committee had identified other alternatives that were studied by the project team. One of these alternatives was the relocation of the railroad. He introduced Mr. Steve Moreland who provided an overview of Moreland Altobelli's railroad study.

Mr. Moreland discussed four railroad alternatives that were analyzed. These included:

- Moving the rail line, which is an expensive alternative and creates visual impacts for the downtown area
- Building a concrete tunnel around exiting line, which increases maintenance costs for the railroad
- Relocating existing S Line that goes through downtown, however this would impact residential areas
- Creating a by-pass that would connect all lines on the east side of downtown, which would required new construction and possible impacts to the Ocmulgee Monument. This would also required double tracking through downtown that would have additional impacts.

The pros and cons of each rail line alternative were presented. Including opportunities for improving the aesthetics through downtown to create a gateway. Mr. Moreland also explained that this study was conducted to ensure that the design concept for the I-16/I-75 project does not preclude the relocation of the railroad. However, the scope of the interchange improvement project does not include the relocation of the railroad. The study does provide information that could be used as a separate endeavor.

Following Mr. Moreland's presentation the group expressed their great appreciation for the presentation and began to ask questions. There were specific questions regarding the alignment of by-pass alternative. Mr. Moreland traced the possible alignment on display map. Other questions included:

Q: How much residential area would be impacted?
A: Mr. Moreland stated that the alternatives tried to avoid as much residential area as possible. Most of the railroad is located in rural areas. More study would be needed to provide this level of detail.

Q: Is there a trade-off if the existing S line is abandoned through downtown in order to double track for a new by-pass?
A: The team all agreed that this would not be the case. Todd Hill and Mr. Palladi explained the position of the Native American Council on relocating the railroad and potential impacts to the Ocmulgee.

Q: Are there any savings to DOT if the railroad was moved?
A: Mr. Palladi stated that there could be but these savings would be offset by other mitigation needs such as the impact on the floodplain. He also reminded them that the cost of the interchange project is $100 million, and the projected cost of relocating the railroad is an additional $118 million, which would more than double the cost of the project.

Q: Who could we talk with to request more details on potential savings or trade-offs of relocating the railroad?
A: Mr. Palladi stated that Mr. Paul Mullins, Director of Planning, would be the person to contact. He also explained that any request should avoid linking the two projects together. The interchange improvement is schedule for completion in 2003-4. Linking the railroad study with this project would mean that all the environmental studies for the railroad would have to be completed before the interchange can move forward. The group agreed that the interchange project should not be delayed.

Q: What is the best way to engage in a conversation with Mr. Mullins?
A: Mr. Palladi suggested they write a letter expressing their position on the railroad and requesting to be included in the planning process through their public involvement efforts.

Q: How long will it take to construct a new by-pass?
A: Mr. Moreland stated it would take approximately 3 ½ years for construction only, not including the planning and design period.

Q: How many miles of new rail line would this require?
A: Approximately 31 miles.

C: If the planning process is occurring now for passenger rail and service could be scheduled for 2004-5 (as stated by previous presenter), we need a new line sooner than 3 ½ years.

Q: Isn't there an advantage having a new line v. upgrading an old line?
A: Mr. Palladi stated that this is not always true. An existing line is already in a disturbed environment and therefore the impacts could be less.

Q: Can the two projects be moved forward at the same time?
A: Again Mr. Palladi stated this can be addressed through the planning process. Mr. Moreland stated that studies are already being conducted as part of the Passenger Rail planning process. The next public hearing on this study will be October 30th in Macon.

C: The most important thing said today was that we should keep the two projects separate so that the interchange improvement doesn't become a 15-year project.

Before the meeting ended Mr. Joel Harrell with Norfolk Southern was asked for his comments on this study. Mr. Harrell stated that their operations group has not seen this study, but the general perception is to not include this with the interchange project. Relocation of the rail line is not new and the railroad is willing to investigate this option. They are willing to work with DOT or others to study this further. He also requested copies of the display to assist the railroad in their review.

Action Items:

The group requested a copy of the railroad study and Mr. Palladi stated that a copy would be provided once it is final. COMAR will also send a letter to Mr. Paul Mullins requesting information regarding cost offsets associated with relocating the railroad.

Q: = question
A: = answer
C: = comment

COORDINATION WITH PASSENGER RAIL PROGRAM AND NEWTOWN MACON
JANUARY 4, 2001

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1(92), NH-IM-16-1(131), NH-IM-75-2(177), and NH-16-1(104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 11:00 A.M.
Location: GDOT Urban Design Conference Room

MEETING MINUTES

Attendees:

Ms. Genetha Rice-Singleton	Urban Design Project Manager - GDOT
Mr. Brad Hale	Consultant Project Manager - MAAI
Mr. Steve Roberts	Georgia Rail Consultants (GRC)
Mr. Arthur Vaughn	Georgia Rail Passenger Authority (GRPA)
Mr. Conie Mac Darnell	Newtown Macon
Mr. Douglas Alexander	Georgia Rail Passenger Authority (GRPA)
Mr. Joseph Passoneau	JRP&P

Ms. Genetha Rice-Singleton opened the meeting with introductions. Mr. Darnell stated that Mr. Joseph Passoneau had been hired by Newtown Macon to study the feasibility of relocating Norfolk Southern's "H" line within the limits of the proposed interstate/interchange improvements. The goal of this meeting was to familiarize Mr. Passoneau with the proposed roadway improvements and the rail study prepared by Moreland Altobelli (MAAI).

Mr., Hale gave a brief explanation of the roadway improvements involved with the above referenced projects. He described the various topographical and environmental constraints involved with the project including the Ocmulgee River and the associated 100-year flood plain. Mr. Roberts and Mr. Vaughn asked what the status of this project was. Ms. Singleton responded that the project was currently in the concept validation phase and that construction was currently scheduled for FY 2004.

The discussion continued with Mr. Hale describing the alternatives analyzed by Moreland Altobelli for re-locating the Norfolk Southern railroad. A plan and profile display was used to explain the implications of re-locating the railroad from the west bank to the east bank of the river. Mr. Hale explained that, in accordance with FEMA guidelines for federal aid projects, the Georgia Department of Transportation (GDOT) requires that proposed bridges maintain at least one foot of freeboard over the 100-year flood elevation. To meet this criteria, the railroad would need to be elevated approximately 15 feet above it's existing grade. Raising the grade of the railroad would require raising the grades of several of the I-16/I-75 interchange ramps. It was also pointed out that the proposed railroad would be in conflict with the Second Street Bridge over the floodplain. Correcting this would involve complete re-construction of Second Street from Walnut Street (downtown) to Emery Highway. It would also involve raising the grade of I-16 by at least 25 feet to span the re-constructed Second Street (Second Street currently spans I-16).

Mr. Passoneau asked if this alternative were technically possible. Mr. Hale responded that it was "technically" possible despite having an expensive cost of construction and negative impacts to the surrounding roadways. Mr. Darnell asked what the estimated construction cost would be. Mr. Hale responded that MAAI estimated the railroad re-location and additional roadway construction costs to be approximately $120 million. Mr. Darnell commented that this estimate seemed excessive.

Mr. Darnell stressed the importance of passenger rail for the city of Macon and that the re-construction of the I-16/I-75 interchange was the perfect opportunity to allow for a new alignment of the railroad. Mr.

Darnell also pointed out that adding additional track for passenger rail traffic on Norfolk's Southern's current "H" line alignment would not be possible due it's proximity to the cemetery and the river. Mr. Darnell asked Mr. Hale if every possible solution to this problem had been analyzed. Mr. Hale responded that Moreland Altobelli had analyzed four possible alternatives as part of the railroad study requested by GDOT. He explained that their goal was to develop a concept for re-location of the railroad which best fit the proposed interchange improvements.

Mr. Roberts explained to the group that any alternative for passenger rail should enter Terminal Station from the north (as does the current "H" line) to allow trains to continue south without turning around. For this reason, an upgrade of the existing "S" line, which enters Terminal Station from the South, is an undesirable option for passenger rail.

Mr. Passoneau requested plan & profile information for the railroad alternative, I-16, and Second Street. Ms. Singleton responded that any requests for information concerning the I-16/I-75 interchange project or the associated railroad study needs to be submitted to the GDOT Office of Urban Design in the form of a written request.

MEETING MINUTES
February 6, 2001 – Meeting with Bibb County Parks and Recreation

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1(92), NH-IM-16-1(131), NH-IM-75-2(177), and NH-16-1(104)
P.I. Numbers: 311000, 311005, 311400, 311410

Location: Macon-Bibb County parks & Recreation Department Conference Room
Time: 9:00 a.m.

Attendees:

Mike Anthony	**Macon-Bibb County Parks & Recreation, Director**
Todd Hill	**MA, Consultant Environmental Manager**
Linda Cooks	**MA, Historian**

Todd Hill discussed the preferred concept, and specifically how it might affect the boat ramp and adjacent park area. It was noted that the current concept effectively stayed off the boat ramp, however the existing pedestrian trail that extends from Spring Street to Coliseum would be compromised. Mr. Anthony noted that there is an existing plan to develop the park area and that he would provide this to us. He also noted that plans had been suspended since they were aware of the I-16 improvements. Mr. Anthony requested a blown up plan of the park area, which indicates the current concept on it. Mr. Anthony noted that the overall pedestrian plan for Macon included a connection between Central City Park, the Ocmulgee Mounds, the Coliseum, and the boat ramp and park. Mr. Anthony noted that they had plans to construct a concrete surface on the trail. He also discussed the possibility of enhancing the boat ramp area in order to make it more functional.

The last issue Mr. Hill discussed is the possible relocation of the bridge over Walnut Creek on Jeffersonville Road to the pedestrian trail in the boat ramp park. The need to move this historic bridge as part of another road project was noted. Mr. Anthony thought that was a good idea and noted that if it wasn't feasible for this park maybe it could be used on another trail project.

Minutes for the January 14, 2002 Coordination Meeting for I-16/I-75 Interchange Reconstruction and the Ocmulgee Greenway Project

Macon-Bibb County Parks and Recreation Department Conference Room

10:00 AM

Attendees:

Mr. Mike Anthony	Director-Macon-Bibb County Parks and Recreation
Ms. Genetha Rice-Singleton	Urban Design Project Manager - GDOT
Ms. Angela Alexander	Assistant State Urban Design Engineer - GDOT
Mr. Bill Causey	Bibb County Engineers Office
Mr. Ken Sheets	Bibb County Engineers Office
Mr. Chris Sheridan	Ocmulgee Greenway consultant
Mr. Connie Mac Darnell	New Town Macon
Mr. Todd Hill	Environmental Project Manager – MAAI

The meeting began with a detailed discussion regarding the proposed interface of the Greenway and the proposed improvements in the area of the Otis Redding Bridge. Mike Anthony noted the desire to connect the four quadrants in this area (Central City Park, Gateway Park, Ocmulgee Mounds, and the Greenway on the north east side of the Ocmulgee River). Future connection to the Centreplex was also discussed.

Angela Alexander noted that 10-foot wide sidewalks are proposed for both sides of the Bridge. Mike Anthony and Bill Causey noted that they were discussing temporary access across the bridge with Glen Durrance at the GDOT District Office. They noted the desire to provide a protected pedestrian walkway across the bridge. Possible suggestions included Jersey barriers or the water filled plastic attenuators.

Mike Anthony also discussed the proposed pedestrian bridge from Central City Park to the Mounds, and noted his concern for pedestrian safety at the points where at grade road crossings are proposed. Angela Alexander noted that safe pedestrian crossings would be integral to the design in this area.

Mike Anthony stated that access to the Greenway for both pedestrians and vehicles from the Otis Redding Bridge/I-16 off-ramp needs to be provided (existing access by GA Power and County Water Authority). Angela Alexander noted that the design plans would include this connection.

Mike Anthony noted his concern over the impacts to the Gateway Park from the proposed Bridge improvements. Angela noted that the exact footprint of the impacts would not be known until design plans are started. Angela also explained that the impacts to the Gateway Park were necessary to avoid impacts to the Ocmulgee Mounds and other constraints regarding clearance under the existing interstate. She stressed that the engineers are under strict direction to minimize the impacts to the Park.

In the area of Second Street Mike Anthony wanted to know if the CD road could be brought in tighter to the mainline to provide more room for the Greenway. He indicated that the County had coordinated with GA Power regarding the relocation of their overhead lines in this area assuming that this was the reason for not moving the CD closed to the I-16 mainline. Todd Hill indicated that he wasn't sure that this was the reason for the location of the CD, but would check with Brad Hale, project engineer at Moreland, to determine the feasibility of shifting the CD closer.

The next area of discussion was focused around improvements in the area of the existing boat ramp at Spring Street. Mike Anthony provided a set of plans to GDOT detailing the proposed layout for parking and trail improvements at this location, which also included a wider pedestrian bridge over the creek in this area. Todd Hill noted previous discussions regarding the potential relocation of the historic bridge from the Jeffersonville Road improvement project. Angela Alexander was concerned about the existing access to the boat ramp from Second Street, and indicated that she wanted Moreland to investigate it further to see if improvements could be completed to improve this access.

Mike Anthony then indicated that the County was proposing to purchase the property adjacent to the River on the west side of Spring Street, which would be along the proposed second phase of the Greenway. Todd Hill noted that this would require GDOT to complete a section 6(F) analysis for impacts to this property, which is similar to a 4(F) analysis. Mike Anthony indicated that he had already discussed this issue with the GA DNR and that they did not think this would cause any problems with the I-16 project. The DNR indicated that a land swap for another parcel along the proposed Greenway Corridor could provide suitable mitigation.

The next area discussed was the proposed Greenway connection across the Ocmulgee River. Mike Anthony noted the possibility of constructing a pedestrian bridge that would hang off of the proposed roadway bridge structures in this area. Angela Alexander noted that pedestrian access on an interstate/interchange type project was not part of the project need and purpose. She noted that GDOT would work with the County to not preclude their proposals for the Greenway, but did not feel that portions of the Greenway should actually part of the interchange improvement project.

At this point Connie Mack Darnel and Chris Sheridan joined the meeting. Mr. Darnel also reiterated the possibility of shifting the CD road at Second Street closer to the mainline and noted the possibility of rerouting the GA Power high-tension lines to the opposite side of the Ocmulgee River.

The next area discussed is located between I-75 and the River north of the interchange where it is proposed to construct a retaining wall to minimize impacts to the floodplain. The County wants to ensure that adequate room is provided to permit the proposed Greenway trail to be constructed in this area. Todd Hill noted that the engineers were aware of this concern and that topographic surveys had been completed in this area. Chris Sheridan requested a copy of this mapping. Genetha noted that she was already in contact with Moreland engineers to get a copy of the mapping.

Chris Sheridan discussed the desire to expand the proposed tunnel beneath I-75 to accommodate a pedestrian connection to the Greenway from Riverside Drive. Todd Hill and Angela Alexander noted concerns for pedestrian safety and increased cost to the project that was not supportive of the project need and purpose.

The final area discussed by Chris Sheridan and Connie Mack Darnell is a proposed 207-acre passive park at the old Water Works Site, which is set for construction in the very near future. Connie Mack discussed the feasibility of constructing a frontage road between I-16 and the existing residential area at the Pierce Avenue exit and connecting to an existing service road under the existing railroad in the area. Connie Mack noted that the existing access to the site from pierce Avenue is through the residential area, and he felt that significant traffic to the park would impact the neighborhood. Todd Hill noted the extensive wetlands and stream channel that would be impacted by any construction in that area. Potential floodplain impacts were also noted. Angela Alexander suggested that the proposed park be incorporated into the County Master Plan.

Coordination Meeting – Ocmulgee Heritage Trail
January 10, 2003

I-16/I-75 Widening and Interchange Modification
GDOT Project Numbers: NH-IM-16-1 (92), NH-IM-16-1 (131), NH-IM-75-2 (177), and NH-16-1 (104)
P.I. Numbers: 311000, 311005, 311400, 311410

Time: 10:00 AM
Location: Moreland Altobelli - Macon Branch Office

Attendees:

Mrs. Angela Alexander	GDOT- Assistant Urban Design Engineer
Mrs. Genetha Rice-Singleton	GDOT- Urban Design Project Manager
Ms. Marlo Clowers	GDOT- Urban Design
Mr. Bill Causey	City of Macon – Engineering
Mr. Reginald Tabor	MB Parks & Rec.
Mr. Brad Hale	Moreland Altobelli- Consultant Project Manager
Mr. Tim Heilmeier	HNTB
Ms. Ashley Chan	HNTB
Mr. Nimrod W. Long III	Nimrod Long & Associates
Mr. Dennis Welch	Cranston, Robertson & Whitehurst, P.C.
Mr. Scott Williams	Cranston, Robertson & Whitehurst, P.C.
Mr. Mike Ford	NewTown Macon

Purpose: The consulting firms of Nimrod Long & Associates (NLA) and Cranston, Robertson & Whitehurst (CRW) are currently developing plans to extend the Ocmulgee Greenway multi-use path in several locations within the limits of the above referenced interchange project(s). The purpose of this meeting was to coordinate the location and design of these projects and determine potential conflicts.

Meeting Highlights

To aid in the discussion, CRW provided preliminary plans for the Ocmulgee Heritage Trail extension. Moreland Altobelli also provided a display depicting the proposed interstate improvements, and drawings showing the trail project superimposed on the roadway project. The Ocmulgee Heritage multi-use path, as proposed, will intersect the I-16/I-75 interchange improvement project in the following locations: 1) The Coliseum Drive bridge over the Ocmulgee River – on both sides of the river, 2) the existing Spring Street bridge on the east side of the Ocmulgee River and 3) The I-16/I-75 interchange bridges over the Ocmulgee River – on the east side of the river only.

The following are the major discussion points from the meeting:

- Currently, the proposed trail extension is in conflict with the proposed widening of Coliseum Drive and the Otis Redding Bridge over the Ocmulgee River. Modifications may be necessary to both projects in order to allow the pedestrian trail to pass underneath the bridge without having a negative impact on the Ocmulgee River and the 100-yr flood elevation. Moreland Altobelli's flood study will need to take the proposed trail into consideration.

- The I-16/Coliseum Drive interchange is currently scheduled for construction in FY 2005, and the remaining I-16/I-75 interchange improvements are scheduled for FY 2007. The Ocmulgee Heritage Trail projects are scheduled for completion by 2004.

- The proposed construction on the Otis Redding Bridge would require reconstructing the proposed trail underneath. NLA proposes to build the trail per the current layout as an "interim" condition. They will

prepare an "ultimate" condition layout that conforms to the proposed improvements to Coliseum Drive, for the Department to implement during construction of I-16 project. The Department will determine whether the NLA proposal is acceptable after a decision is made regarding whether to widen or replace the Otis Redding Bridge.

- The Otis Redding Bridge requires raising approximately 3 – 4 feet to maintain one foot of freeboard over the 100-year flood. In addition, the end-bent adjacent to Gateway Park may need to be skewed from the current alignment to be more parallel to the riverbank. Skewing the end-bent improves the hydraulics of the river during the flood condition, and allows more room for the multi-use path underneath.

- HNTB is currently preparing cost estimates for two Coliseum Drive bridge alternatives: 1) Construct a new bridge with pre-stressed concrete beams, and 2) Jack and widen the existing steel structure. A cost comparison for these alternatives will be completed next week. The GDOT will determine whether to widen or replace the bridge following the results of the cost comparison.

- CRW's current plan shows a proposed parking lot adjacent to Coliseum Drive on the northeast side of the river. The parking lot would be accessed via an existing driveway to the sanitary sewer pump station. The Department opposed providing the parking area because the driveway is located in the limited access of a proposed interchange ramp. CRW and NLA agreed to remove the parking lot from the trail plans.

- Mr. Welch inquired about the location of the proposed sidewalks on Coliseum Drive underneath I-16. MA responded that the proposed sidewalks are 10' wide and are adjacent to the roadway curb underneath the interstate bridges. The sidewalks include a 2' offset grass strip from the roadway curb everywhere else. Mr. Welch asked if the curb height could be increased to 9". GDOT responded that the normal curb height is 6" on this type of roadway (urban arterial).

- The Ocmulgee Heritage Trail consultants questioned whether the eastbound interstate ramps between Spring Street and Coliseum could be shifted closer to the interstate to avoid/minimize visual impacts to the recently constructed Greenway path. Mr. Hale responded that the current configuration was necessary to achieve vertical clearance under Second Street. The ramps could be shifted if the Second Street bridge were raised several feet, however, this would require at least two additional electrical transmission towers to be relocated. Mr. Causey stated that the local government was unable to fund relocation of the transmission towers.

- The proposed trail passes underneath the Spring Street Bridge, and requires excavation and retaining walls. The construction is outside of the limits of the I-16/I-75 interstate improvement project, but requires coordination with GDOT's Bridge Office. CRW submitted their plan to GDOT for further review.

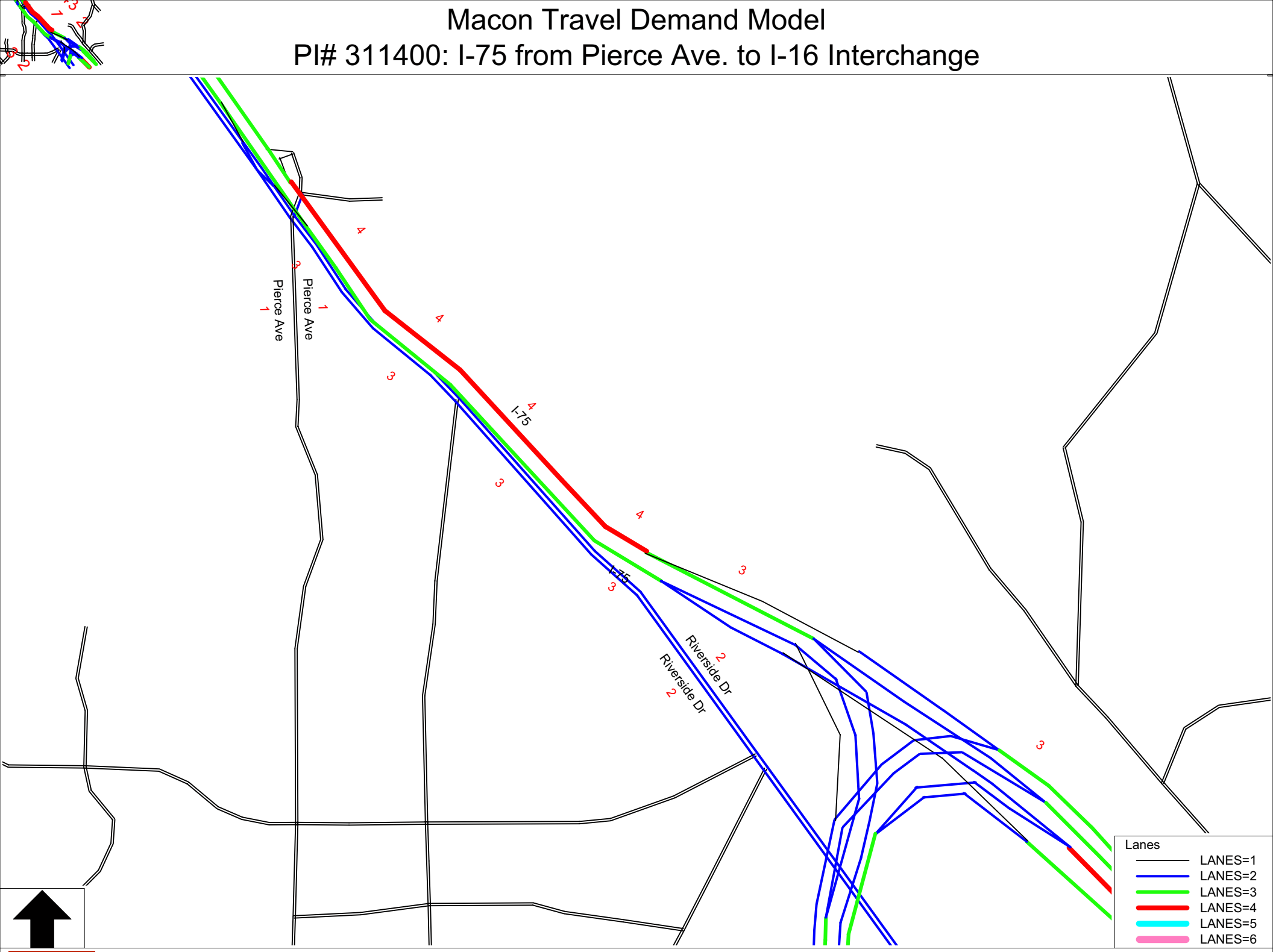
- Mr. Causey questioned whether the new 100-year flood overtops the levee east of Coliseum Drive. He also asked whether the state would pay to improve the levee as they did when the interstate was constructed in the '60's (if it is affected by the proposed construction). Mr. Hale responded that MA's initial flood study and FEMA's Flood Insurance Rate Map (FIRM) both show that this section of the levee is already insufficient. MA will re-evaluate this area with the final flood study. GDOT will consider this request once MA's flood study is complete.

- There was a brief discussion about alternatives for crossing the river with a pedestrian bridge in the vicinity of the I-16/I-75 interchange. Newtown Macon requested that GDOT consider attaching a pedestrian (multi-use) section to one of the proposed interstate bridges. The project team responded that this was undesirable and would probably not pass GDOT or FHWA approval. Mr. Causey noted that a separate pedestrian bridge would be too expensive for the city to build. The meeting concluded without resolution on this issue.

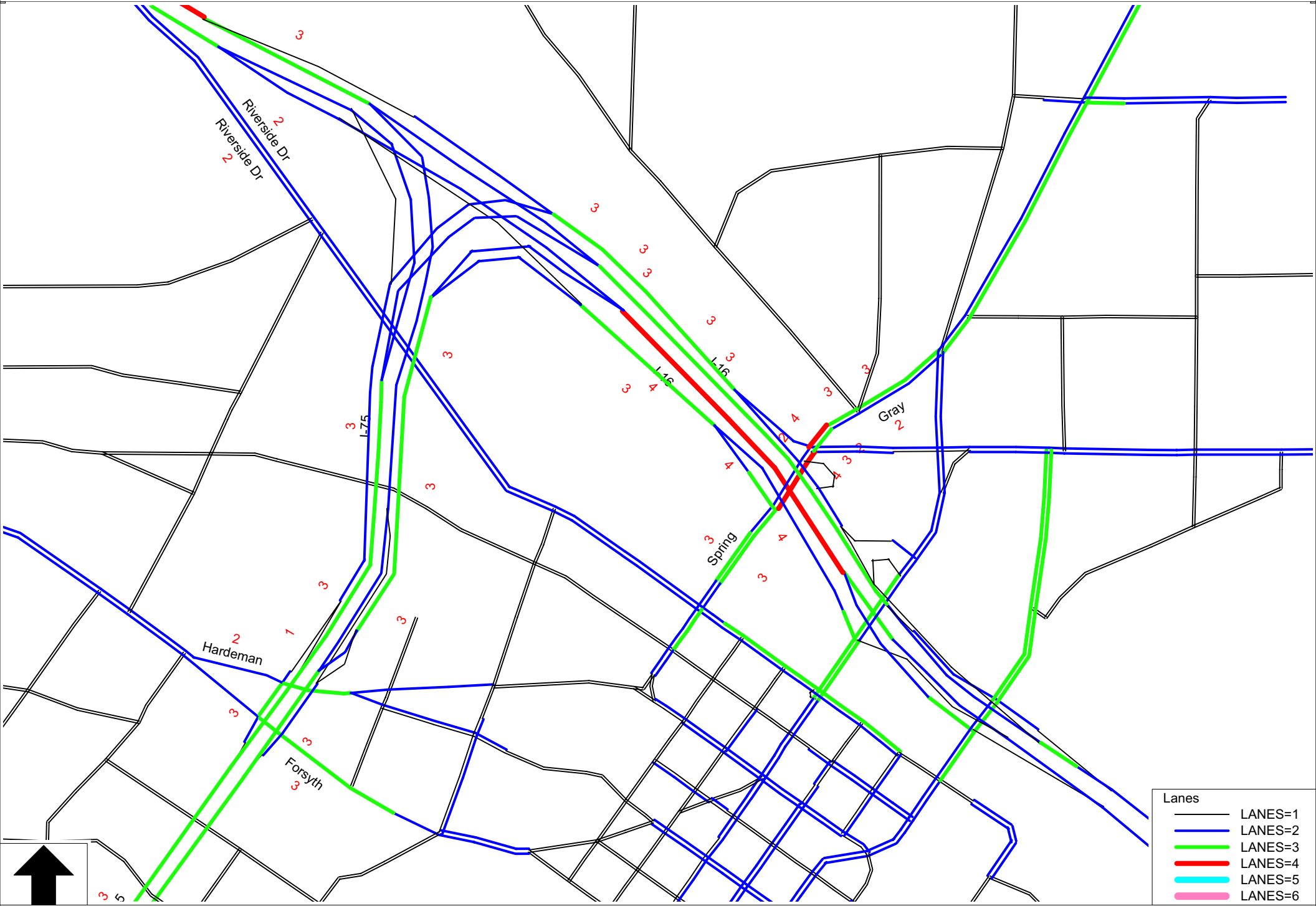
ATTACHMENT #11

CONFORMING PLAN SCHEMATICS

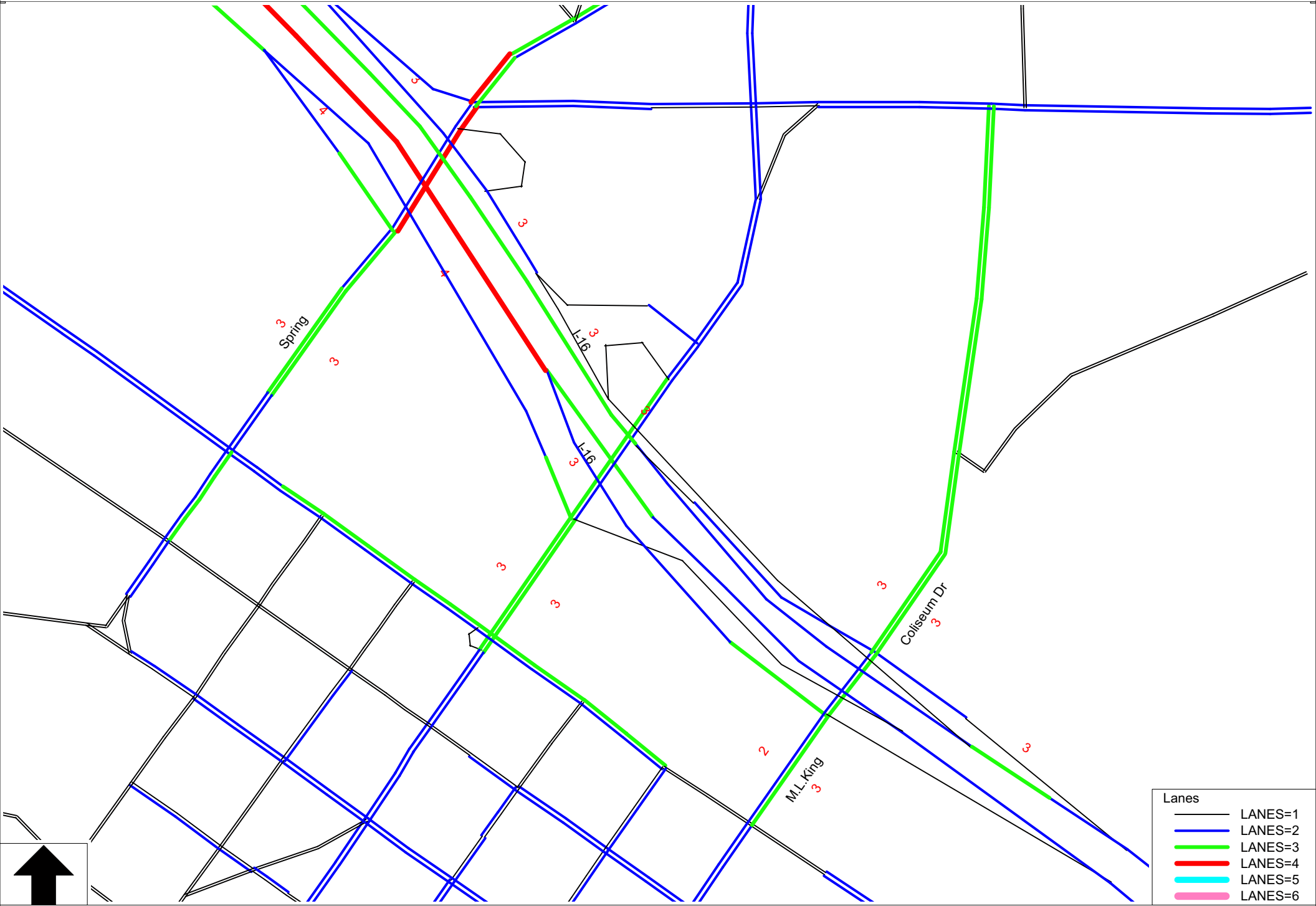
Macon Travel Demand Model
PI# 311400: I-75 from Pierce Ave. to I-16 Interchange



Macon Travel Demand Model
PI# 311410: I-75 from Forsyth/Hardeman Interchange to I-16 at Spring St.



Macon 2020 Travel Demand Model
PI# 311000 & 311005: I-16 from Spring St. to ML King Interchange



ATTACHMENT #12

CONCEPT PLAN

I–16 /I–75 INTERCHANGE IMPROVEMENTS

PROJECT NO. NH–IM–75–2(177)
I–75 FROM I–16 TO PIERCE AVE.

LEGEND

- PROPOSED INTERSTATE SYSTEM
- PROPOSED CD ROADS
- PROPOSED SERVICE RAMPS & SIDESTREETS
- PROPOSED BRIDGES
- EXISTING PROPERTY LINES
- WETLANDS

Moreland Altobelli Associates, Inc.

NOT TO SCALE

PROPOSED OCMULGEE HERITAGE TRAIL

OCMULGEE RIVER

I–75 NB

I–75 SB

RIVERSIDE DR.

CORBIN AVE.

PIERCE AVE.

PROPOSED NOISE/VISUAL BARRIER (HT. 20')

PROPOSED WIDENING BY PROJECT NH–IM–75–2(211)

PRELIMINARY

NOTE:
THIS DRAWING REPRESENTS A PRELIMINARY DESIGN FOR THE REFERENCED PROJECT AND IS SUBJECT TO CHANGE. PLEASE CHECK THE PROJECT WEBSITE (WWW.I16I75.COM) FOR UPDATES.

I-16 /I-75 INTERCHANGE IMPROVEMENTS
PROJECT NO. NH-16-1(104)
I-16 /I-75 INTERCHANGE

LEGEND

- PROPOSED INTERSTATE SYSTEM
- PROPOSED CD ROADS
- PROPOSED SERVICE RAMPS & SIDESTREETS
- PROPOSED BRIDGES
- WETLANDS
- EXISTING PROPERTY LINES
- PROPOSED LIMITED ACCESS
- PROPOSED LOCAL STREET IMPROVEMENTS
- PROPOSED LOCAL STREET RE-SURFACING
- PROPOSED GREENSPACE /PARKS
- POTENTIAL DISPLACEMENTS

NOT TO SCALE

Moreland Altobelli Associates, Inc.

PRELIMINARY

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I-75 SB
I-75 NB
NORFOLK SOUTHERN R.R.
RIVERSIDE DR.
RIVERSIDE CEMETERY
PURSLEY ST.
PLEASANT HILL HISTORIC DISTRICT
LINWOOD CEMETERY
FIRST AVE.
SECOND AVE.
THIRD AVE.
FOURTH AVE.
FIFTH AVE.
WALNUT ST.
WOODLIFF ST.
FRONTAGE RD.
MIDDLE ST.
MONROE ST.
MADISON ST.
HARDEMAN AVE.
GEORGIA AVE.
S. NONEEFEE
STEWART LN.
PROPOSED NOISE /VISUAL BARRIER
PROPOSED CULVERT EXTENSION
PROPOSED 10' TRAIL (TENTATIVE)
OCMULGEE RIVER
PROPOSED OCMULGEE HERITAGE TRAIL
I-16 EB
I-16 WB

I–16 /I–75 INTERCHANGE IMPROVEMENTS
PROJECT NO. NH–IM–16–1(92)
I–16 FROM I–75 TO COLISEUM DR.

NOT TO SCALE

SHIRLEY HILLS HISTORIC DISTRICT

GLENRIDGE DR.

PROPOSED NOISE/VISUAL BARRIER (HT. 22')

I–16 WB

PROPOSED NOISE/VISUAL BARRIER (HT. 25'-30')

EMERY HWY.

BIBB CO. HEALTH DEPT.

HOSPITAL

I–16 EB

OCMULGEE RIVER

OCMULGEE HERITAGE TRAIL

ROSE HILL CEMETERY

SPRING ST.

NORFOLK – SOUTHERN R.R.

SECOND ST.

RIVERSIDE DR.

WALNUT ST.

LEGEND

- PROPOSED INTERSTATE SYSTEM
- PROPOSED CD ROADS
- PROPOSED SERVICE RAMPS & SIDESTREETS
- PROPOSED BRIDGES
- EXISTING PROPERTY LINES
- WETLANDS
- POTENTIAL DISPLACEMENTS

Moreland Altobelli Associates, Inc.

PRELIMINARY

NOTE:
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I–16 /I–75 INTERCHANGE IMPROVEMENTS

PROJECT NO. NH–IM–16–1(131)

I–16 /COLISEUM DR. INTERCHANGE

NOT TO SCALE

OCMULGEE NATIONAL MONUMENT

COLISEUM DR./M.L.K. JR. BLVD.

MACON COLISEUM

I–16 WB

I–16 EB

OCMULGEE RIVER

RIVERSIDE DR.

OCMULGEE HERITAGE TRAIL

GATEWAY PARK

LEGEND

- PROPOSED INTERSTATE SYSTEM
- PROPOSED CD ROADS
- PROPOSED SERVICE RAMPS & SIDESTREETS
- PROPOSED BRIDGES
- EXISTING PROPERTY LINES
- WETLANDS

Moreland Altobelli Associates, Inc.

PRELIMINARY

NOTE:
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October 7, 2009

Mr. Nicoe Alexander, P.E.
Georgia Department of Transportation
Office of Design
One Georgia Center
600 West Peachtree St. NW, 27th Floor
Atlanta, GA 30308

Re: **Consultant QC/QA Certification Letter**
Projects: NHIM0-0016-01(092), NHIM0-0075-02(177), NH000-0016-01(104), & NHIM0-0016-01(131)
PI Nos. 311000, 311400, 311410, & 311005
I-16/I-75 Interchange Improvements, Bibb County

Dear Mr. Alexander,

This letter is to certify that the below specified milestone/contract document has been prepared in accordance with GDOT standards and has been confirmed by review that the presentation and information is accurate based on Moreland Altobelli Associates' internal quality control and quality assurance policies, procedures, and measures.

Milestone/Contract Document: **Revised Concept Report**

PM Signature: Brad Hale Date: 10/7/2009

QA Signature: Maurice J. Sheehan Date: 10/7/2009

QC Signature: Brad Hale Date: 10/7/2009

Respectfully,

Brad Hale

Brad Hale, P.E.
Project Manager, Moreland Altobelli Associates

cc: Brad Hale, File 07516